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NEWS 5	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS 6	Aug 26	Sequence searching in REGISTRY enhanced
NEWS 7	Sep 03	JAPIO has been reloaded and enhanced
NEWS 8	Sep 16	Experimental properties added to the REGISTRY file
NEWS 9	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS 10	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985
NEWS 11	Oct 24	BEILSTEIN adds new search fields
NEWS 12	Oct 24	Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 13	Nov 18	DKILIT has been renamed APOLLIT
NEWS 14	Nov 25	More calculated properties added to REGISTRY
NEWS 15	Dec 04	CSA files on STN
NEWS 16	Dec 17	PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 17	Dec 17	TOXCENTER enhanced with additional content
NEWS 18	Dec 17	Adis Clinical Trials Insight now available on STN
NEWS 19	Jan 29	Simultaneous left and right truncation added to COMPENDEX, ENERGY, INSPEC
NEWS 20	Feb 13	CANCERLIT is no longer being updated
NEWS 21	Feb 24	METADEX enhancements
NEWS 22	Feb 24	PCTGEN now available on STN
NEWS 23	Feb 24	TEMA now available on STN
NEWS 24	Feb 26	NTIS now allows simultaneous left and right truncation
NEWS 25	Feb 26	PCTFULL now contains images
NEWS 26	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS 27	Mar 19	APOLLIT offering free connect time in April 2003
NEWS 28	Mar 20	EVENTLINE will be removed from STN
NEWS 29	Mar 24	PATDPAFULL now available on STN
NEWS 30	Mar 24	Additional information for trade-named substances without structures available in REGISTRY
NEWS 31	Apr 11	Display formats in DGENE enhanced
NEWS 32	Apr 14	MEDLINE Reload
NEWS 33	Apr 17	Polymer searching in REGISTRY enhanced
NEWS 34	Apr 21	Indexing from 1947 to 1956 being added to records in CA/CAPLUS
NEWS 35	Apr 21	New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX
NEWS 36	Apr 28	RDISCLOSURE now available on STN
NEWS 37	May 05	Pharmacokinetic information and systematic chemical names added to PHAR

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 NEWS EXPRESS  April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
               MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
               AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
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DICTIONARY FILE UPDATES:    5 MAY 2003  HIGHEST RN 510776-00-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

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in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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L1      STRUCTURE UPLOADED

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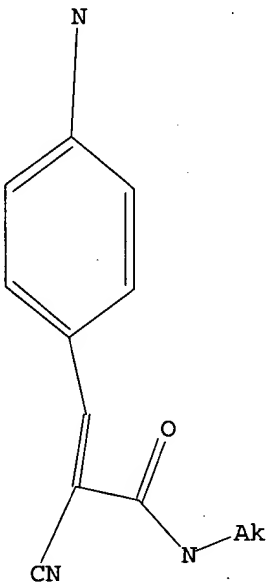
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SCREEN SEARCH COMPLETED -    385 TO ITERATE

100.0% PROCESSED     385 ITERATIONS                          6 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:         6523 TO     8877
PROJECTED ANSWERS:               6 TO      266

L2             6 SEA SSS SAM L1

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FULL SCREEN SEARCH COMPLETED -   7302 TO ITERATE

100.0% PROCESSED    7302 ITERATIONS                        214 ANSWERS
SEARCH TIME: 00.00.01

L3           214 SEA SSS FUL L1

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                                              ENTRY    SESSION
FULL ESTIMATED COST                          148.15     148.36

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09772617

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FILE COVERS 1907 - 6 May 2003 VOL 138 ISS 19
FILE LAST UPDATED: 5 May 2003 (20030505/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3 full
L4 57 L3

=> d l4 1-57 ibib abs hitstr

L4 ANSWER 1 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:669731 CAPLUS
DOCUMENT NUMBER: 137:202707
TITLE: A process for producing uniform multilayer second order nonlinear optical polymeric thin polar films
INVENTOR(S): Roberts, M. Joe; Lindsay, Geoff A.; Wynne, Kenneth J.; Chafin, Andrew P.; Stenger-Smith, John D.; Zarras, Peter; Yee, Rena Y.; Holloins, Richard A.
PATENT ASSIGNEE(S): The United States of America as Represented by the Seceretary of the Navy, USA
SOURCE: Statutory Invent. Regist., 13 pp.
CODEN: SRXXEV
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2046	H1	20020903	US 1997-956017	19971022

PRIORITY APPLN. INFO.: US 1997-956017 19971022

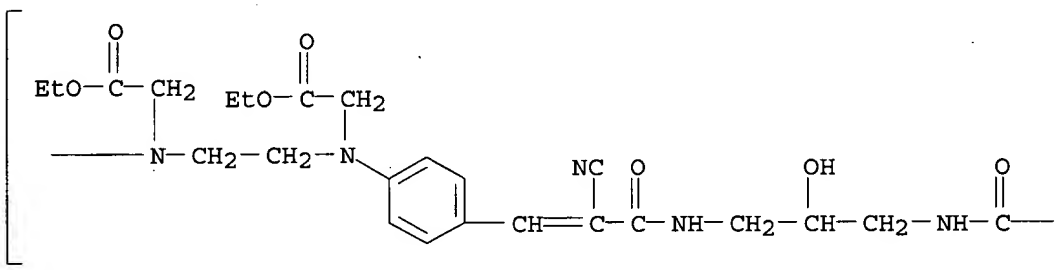
AB The title films incorporate aligned non-centrosym. chromophores each having an electron donor end and an electron acceptor end, and the title process, i.e., alternating polyelectrolyte deposition process, comprises steps of: (1) dipping a substrate (T), e.g., a glass slide, into a first aq. soln. (S1) contg. an NLO-active cationic polymer (A) and removing T from S1 after designed time, (2) cleaning and drying T, (3) dipping the dried T into a second aq. soln. (S2) contg. an anionic polymer (B) and removing T from S2, (4) cleaning and drying T again, (a) repeating the steps 1-4 so that a predetd. plurality of alternating polycation and polyanion layers are built up uniformly on the surface of T. One example of A was prepd. by reacting poly(epichlorohydrin) with 4-picoline and 4-(N-ethyl-N-Et acetalyl)aminobenzaldehyde substantially, and one example

of B was poly(sodium 4-styrenesulfonate).

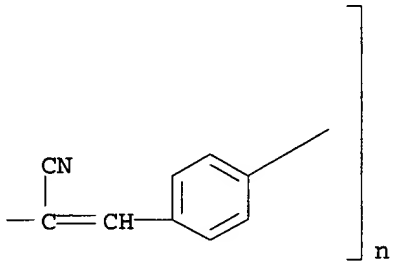
IT **223678-01-1DP**, hydrolyzed, sodium salt **223678-01-1P**
RL: CPS (Chemical process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)
(prepn. of anionic polymer for fabrication of multilayer second order nonlinear optical thin films)

RN 223678-01-1 CAPLUS
CN Poly[[(2-ethoxy-2-oxoethyl)imino]-1,2-ethanediyl[(2-ethoxy-2-oxoethyl)imino]-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)imino(2-hydroxy-1,3-propanediyl)imino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A

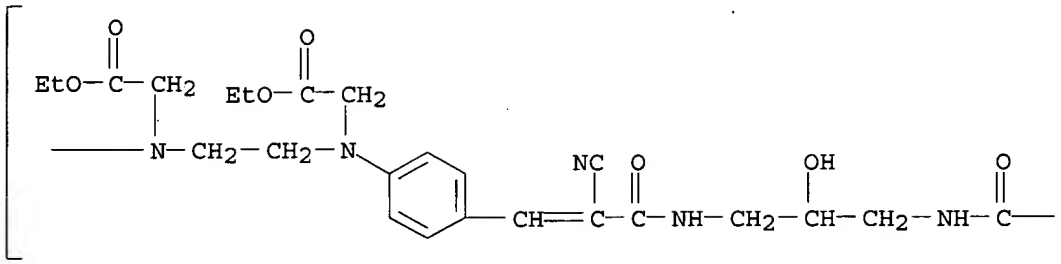


PAGE 1-B

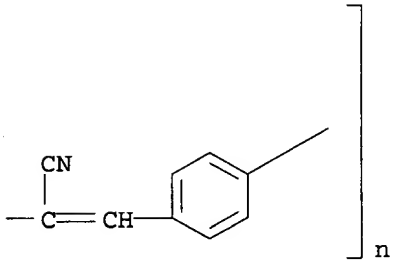


RN 223678-01-1 CAPLUS
CN Poly[[(2-ethoxy-2-oxoethyl)imino]-1,2-ethanediyl[(2-ethoxy-2-oxoethyl)imino]-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)imino(2-hydroxy-1,3-propanediyl)imino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

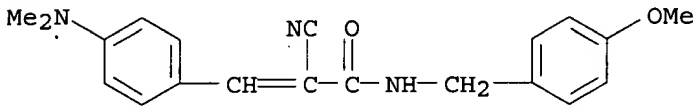
L4 ANSWER 2 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:287721 CAPLUS
DOCUMENT NUMBER: 137:232422
TITLE: Green chemistry approaches to the Knoevenagel condensation: comparison of ethanol, water and solvent free (dry grind) approaches
AUTHOR(S): McCluskey, Adam; Robinson, Philip J.; Hill, Tim; Scott, Janet L.; Edwards, J. Kate
CORPORATE SOURCE: Chemistry, School of Environmental and Life Sciences, The University of Newcastle, Callaghan, 2308, Australia
SOURCE: Tetrahedron Letters (2002), 43(17), 3117-3120
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 137:232422

AB The authors report a comparative study of the Knoevenagel condensation with a variety of substituted benzaldehydes (17 examples) and cyanoamides (3 examples), using three different methodologies: (a) traditional ethanol reflux; (b) water reflux; and (c) solvent free conditions. Almost without exception these reactions proceeded faster, more cleanly and in higher yields when the reactions were conducted in a solvent-free fashion. Addnl., our solvent free approach allowed the use of nitrobenzaldehydes, which failed to yield the desired products under traditional and water based approaches.

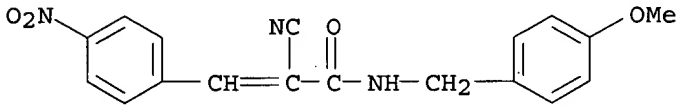
IT **365992-74-1P 367454-19-1P 444755-91-3P 444780-63-6P 459433-33-1P 459433-36-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)

(green chem. approaches to the Knoevenagel condensation)

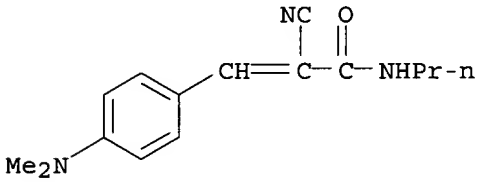
RN 365992-74-1 CAPLUS
CN 2-Propenamide, 2-cyano-3-[4-(dimethylamino)phenyl]-N-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)



RN 367454-19-1 CAPLUS
CN 2-Propenamide, 2-cyano-N-[(4-methoxyphenyl)methyl]-3-(4-nitrophenyl)- (9CI) (CA INDEX NAME)



RN 444755-91-3 CAPLUS
CN 2-Propenamide, 2-cyano-3-[4-(dimethylamino)phenyl]-N-propyl- (9CI) (CA INDEX NAME)



RN 444780-63-6 CAPLUS
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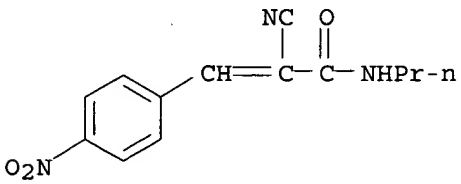
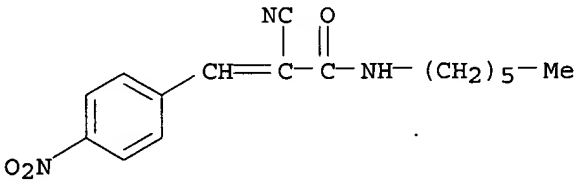
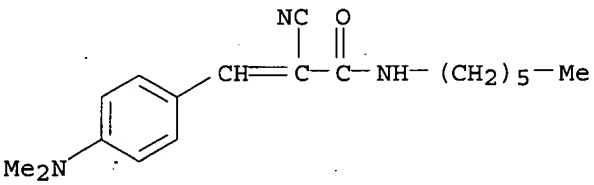


RN 459433-33-1 CAPLUS
CN 2-Propenamide, 2-cyano-N-hexyl-3-(4-nitrophenyl)- (9CI) (CA INDEX NAME)



RN 459433-36-4 CAPLUS
CN 2-Propenamide, 2-cyano-3-[4-(dimethylamino)phenyl]-N-hexyl- (9CI) (CA INDEX NAME)



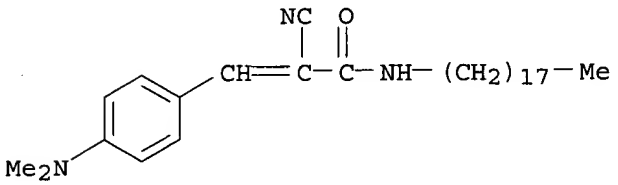
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:372363 CAPLUS
DOCUMENT NUMBER: 135:6999
TITLE: Solid phase change ink compositions containing a carbonyl-based colorant
INVENTOR(S): Banning, Jeffery H.; Meinhardt, Michael B.; Titterington, Donald R.; King, Clifford R.
PATENT ASSIGNEE(S): Xerox Corp., USA
SOURCE: U.S., 16 pp., Cont.-in-part of U. S. 6,028,138. CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 18
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6235094	B1	20010522	US 1999-397348	19990915
US 5830942	A	19981103	US 1996-672815	19960628
US 5994453	A	19991130	US 1998-13410	19980126
US 6028138	A	20000222	US 1998-23851	19980213
US 2001008109	A1	20010719	US 2001-772617	20010130

PRIORITY APPLN. INFO.: US 1996-672815 A2 19960628
US 1998-13410 A2 19980126
US 1998-23851 A2 19980213
US 1999-397348 A3 19990915
OTHER SOURCE(S): MARPAT 135:6999
AB The title colorant can be represented by a general formula: R1COZ(CH2)nCH3, wherein R1, Z and the carbonyl can be comprised by a common ring, Z=.gtoreq.C1 alkyl, O, S, and N, and n is an integer.gtoreq.12, and comprises a chromophore absorbing visible light. One example of the colorant was obtained from the reaction of octadecyl amine, Me cyanoacetate and dimethylaminobenzaldehyde.

IT **340755-31-9P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(yellow colorant; solid phase change ink compns. contg. a carbonyl-based colorant)
RN 340755-31-9 CAPLUS
CN 2-Propenamide, 2-cyano-3-[4-(dimethylamino)phenyl]-N-octadecyl- (9CI) (CA INDEX NAME)

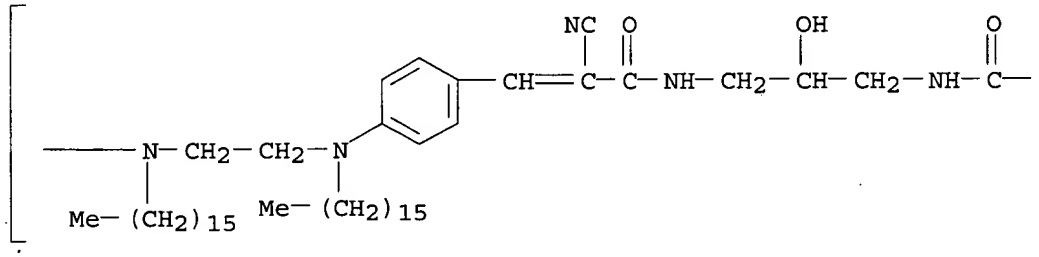


REFERENCE COUNT: 96 THERE ARE 96 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:764458 CAPLUS
DOCUMENT NUMBER: 134:42635
TITLE: Orientation of main-chain accordion polymers having different alkyl chains
AUTHOR(S): Lee, Seung-Hwan; Watanabe, Toshiyuki; Kagoshima, Kaoru; Fujita, Shiro; Mashiko, Sinro; Talukder, Mostafa; Lindsay, Geoffrey A.; Herman, W. N.; Wynne, Kenneth J.; Miyata, Seizo
CORPORATE SOURCE: BASE, Tokyo University of A and T, Koganei, 184, Japan
SOURCE: Molecular Crystals and Liquid Crystals Science and Technology, Section A: Molecular Crystals and Liquid Crystals (2000), 349, 171-174
CODEN: MCLCE9; ISSN: 1058-725X
PUBLISHER: Gordon & Breach Science Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The mol. orientations of homo Y-type LB films of main-chain accordion polymer having different alkyl chain (R = 12 and 16) are investigated. The homo Y-type LB films were prepd. by using Miyata-type deposition system. The nonlinear optical coeffs. of d33 for R = 12 and R = 16, from the result of reflected SHG intensity, are 12.0 and 8.6 pm/V, resp. The bilayer spacing of homo Y-type LB films value from the result of wide angle X-ray diffraction (WAXD) spectra is shorter than the fully extended length of each mol. by CPK model. From the Maker-fringe for Y-type LB films, the SHG strength became the strongest when the P-P polarization was greatly slanted in the substrate. These results reveal that spontaneous polarization remains along the thickness direction. We proposed the structure of a new homo Y-type LB film which is different arrangement between odd-numbered layer and even-numbered layer.
IT **141823-63-4 213699-25-3**
RL: PRP (Properties)
(orientation of main-chain accordion polymers having different alkyl chains)
RN 141823-63-4 CAPLUS
CN Poly[(hexadecylimino)-1,2-ethanediyl(hexadecylimino)-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)imino(2-hydroxy-1,3-propanediyl)imino(2-cyano-1-

oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



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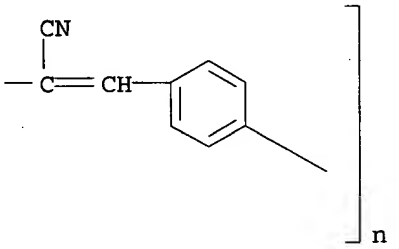
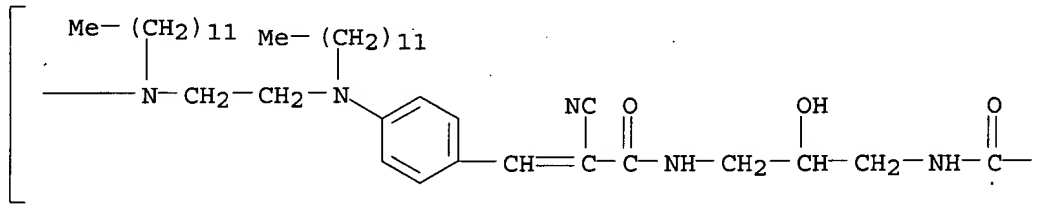


RN 213699-25-3 CAPLUS
CN Poly[(dodecylimino)-1,2-ethanediyl(dodecylimino)-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)imino(2-hydroxy-1,3-propanediyl)imino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



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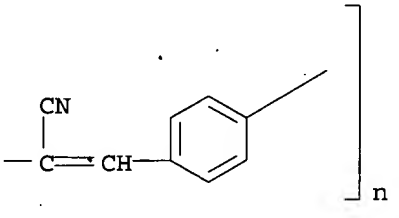
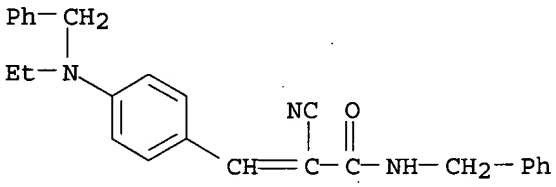


REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:699175 CAPLUS
DOCUMENT NUMBER: 133:268373
TITLE: Orange dye mixture for thermal color proofing and use in thermal dye transfer assembly
INVENTOR(S): Chapman, Derek D.; Kaszczuk, Linda A.; Harris, Mark A.
PATENT ASSIGNEE(S): Eastman Kodak Company, USA
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6127316	A	20001003	US 1999-418234	19991014
EP 1092559	A1	20010418	EP 2000-203456	20001004
EP 1092559	B1	20021211		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001171244	A2	20010626	JP 2000-312831	20001013

PRIORITY APPLN. INFO.: US 1999-418234 A 19991014
OTHER SOURCE(S): MARPAT 133:268373
AB An orange dye-donor element for thermal dye transfer comprises a support having a dye layer comprising a mixt. of a pink dye and a first and second yellow dye dispersed in a polymeric binder, e.g. cellulose acetate.
IT **141458-69-7**
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(yellow dye; orange dye mixt. for thermal color proofing)
RN 141458-69-7 CAPLUS
CN 2-Propenamide, 2-cyano-3-[4-[ethyl(phenylmethyl)amino]phenyl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:687954 CAPLUS
DOCUMENT NUMBER: 133:268370
TITLE: Orange dye mixture for thermal color proofing and use in thermal dye transfer assembly
INVENTOR(S): Chapman, Derek D.; Kaszczuk, Linda A.; Harris, Mark A.
PATENT ASSIGNEE(S): Eastman Kodak Company, USA
SOURCE: U.S., 10 pp.

CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

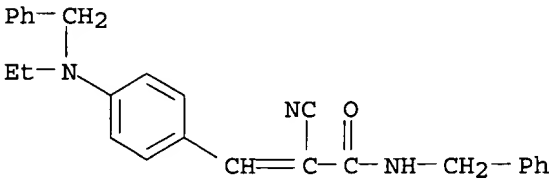
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6124239	A	20000926	US 1999-418339	19991014
EP 1092557	A1	20010418	EP 2000-203432	20001003
EP 1092557	B1	20021218		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001138642	A2	20010522	JP 2000-313884	20001013

PRIORITY APPLN. INFO.: US 1999-418339 A 19991014
OTHER SOURCE(S): MARPAT 133:268370

AB An orange dye-donor element for thermal dye transfer comprises a support having a dye layer comprising a mixt. of a pink dye and a first and second yellow dye dispersed in a polymeric binder, e.g. cellulose acetate.

IT **141458-69-7**
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(yellow dye; orange dye mixt. for thermal color proofing)

RN 141458-69-7 CAPLUS
CN 2-Propenamide, 2-cyano-3-[4-[ethyl(phenylmethyl)amino]phenyl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:680380 CAPLUS
DOCUMENT NUMBER: 133:268368
TITLE: Orange dye mixture for thermal color proofing and use in thermal dye transfer assembly
INVENTOR(S): Chapman, Derek D.; Kaszczuk, Linda A.; Harris, Mark A.
PATENT ASSIGNEE(S): Eastman Kodak Company, USA
SOURCE: U.S., 10 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6124237	A	20000926	US 1999-417790	19991014
EP 1092558	A1	20010418	EP 2000-203433	20001003
EP 1092558	B1	20030423		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

JP 2001171243 A2 20010626 JP 2000-312816 20001013

PRIORITY APPLN. INFO.: US 1999-417790 A 19991014

OTHER SOURCE(S): MARPAT 133:268368

AB An orange dye-donor element for thermal dye transfer comprises a support having a dye layer comprising a mixt. of a pink dye and a first and second yellow dye dispersed in a polymeric binder, e.g. cellulose acetate.

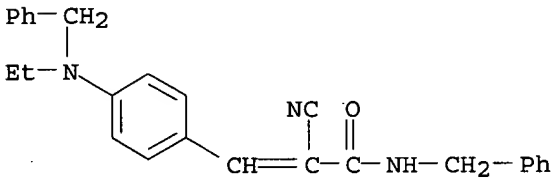
IT **141458-69-7**

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(yellow dye; orange dye mixt. for thermal color proofing)

RN 141458-69-7 CAPLUS

CN 2-Propenamide, 2-cyano-3-[4-[ethyl(phenylmethyl)amino]phenyl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 57 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:414769 CAPLUS

DOCUMENT NUMBER: 133:253108

TITLE: Nonlinear optical (NLO) properties of homo Y-type LB films prepared by Miyata type deposition system

AUTHOR(S): Lee, Seung-Hwan; Watanabe, Toshiyuki; Taluk-Der, Mostafa; Lindsay, Geoffrey; Wynne, Kenneth; Miyata, Seizo

CORPORATE SOURCE: BASE, Tokyo University of Agriculture and Technology, China Lake, Japan

SOURCE: MCLC S&T, Section B: Nonlinear Optics (1999), 22(1-4), 131-134

CODEN: MCLOEB; ISSN: 1058-7268

PUBLISHER: Gordon & Breach Science Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Nonlinear optical (NLO) properties of homo Y-type Langmuir-Blodgett (LB) films prepd. from an accordion polymer using Miyata type deposition system are investigated. The homo Y-type LB films exhibits a well-defined fringe pattern resulting from optical second-harmonic generation (SHG). The homo Y-type LB films show the SHG activity originated in direction of thickness of films. The SH intensity increases quadratically with the no. of LB layers. From the result of reflected SHG intensity, the nonlinear optical coeff. of d33 and d31 values are 12.0 and 1.0 pm/V, resp. The bilayer spacing of homo Y-type LB films from the result of wide angle X-ray diffraction (WAXD) spectrum is 36.8 .ANG.. From these results, the mol. orientation of the accordion polymer is proposed.

IT **213699-25-3**

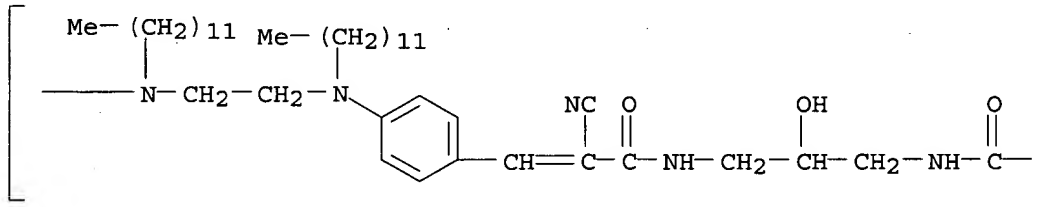
RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(nonlinear optical properties of homo Y-type Langmuir-Blodgett films prepd. by Miyata type deposition system using accordion polymer)

RN 213699-25-3 CAPLUS

CN Poly[(dodecylimino)-1,2-ethanediyl(dodecylimino)-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)imino(2-hydroxy-1,3-propanediyl)imino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



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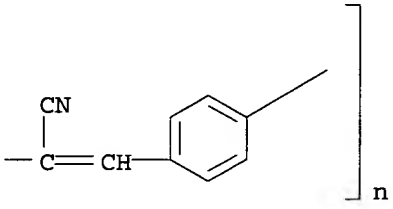


REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 57 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:238401 CAPLUS

DOCUMENT NUMBER: 132:271666

TITLE: Antireflective coatings comprising polymeric polyoxyalkylenated colorants for use with photoresists

INVENTOR(S): Bruhnke, John D.; Lever, John G.

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 8 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6048662	A	20000411	US 1998-211355	19981215

PRIORITY APPLN. INFO.: US 1998-211355 19981215

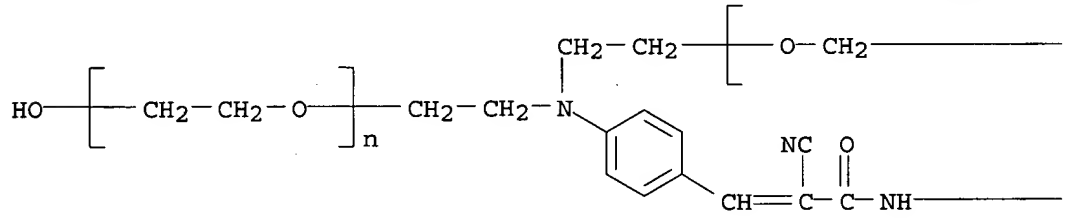
AB This invention relates to antireflective coatings comprising polymeric polyoxyalkylenated colorants. More particularly, the present invention relates to antireflective coatings for utilization in forming thin layers between reflective substrates and photoresists. Such antireflective coatings are very useful and beneficial in the prodn. and fabrication of semiconductor devices by photolithog. procedures. The coatings may also be applied on lenses, mirrors, and other optical components. Methods of

forming such antireflective coatings are also disclosed.

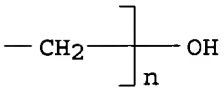
IT **137446-38-9P 263544-62-3P 263544-63-4P**
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. and use in prepg. bottom antireflective coatings for photoresists)

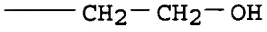
RN 137446-38-9 CAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[[4-[2-cyano-3-[(2-hydroxyethyl)amino]-3-oxo-1-propenyl]phenyl]imino]di-2,1-ethanediyl]bis[.omega.-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



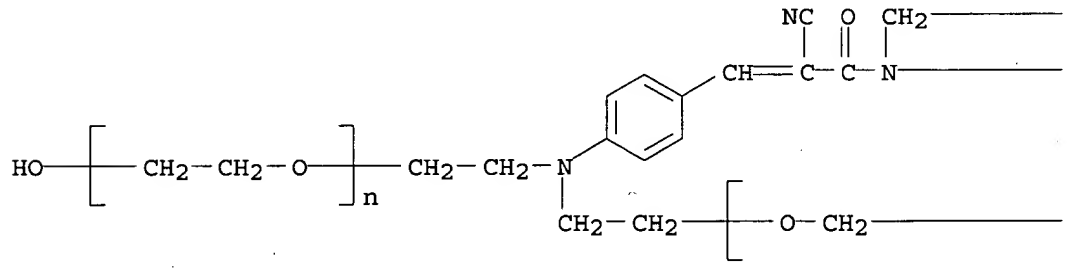
PAGE 1-B





RN 263544-62-3 CAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[[4-[3-[bis(2-hydroxyethyl)amino]-2-cyano-3-oxo-1-propenyl]phenyl]imino]di-2,1-ethanediyl]bis[.omega.-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



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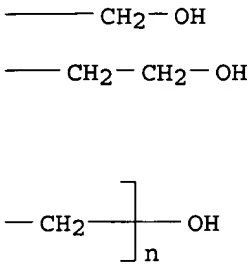
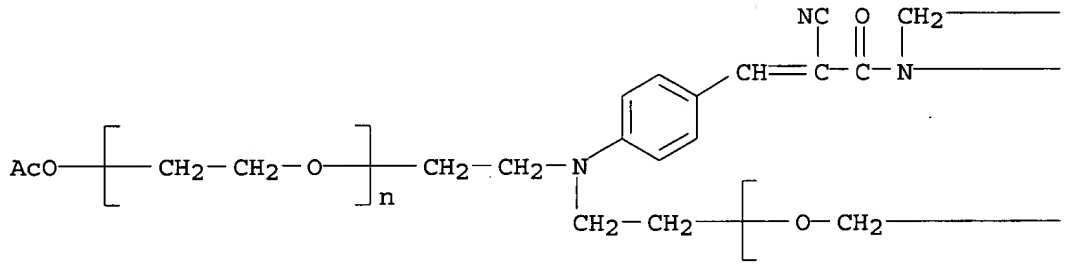
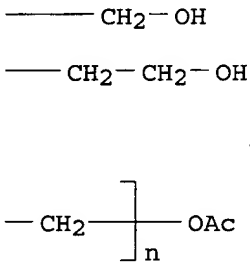


RN 263544-63-4 CAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[[4-[3-[bis(2-hydroxyethyl)amino]-2-cyano-3-oxo-1-propenyl]phenyl]imino]di-2,1-ethanediyl]bis[.omega.-(acetyloxy)- (9CI) (CA INDEX NAME)

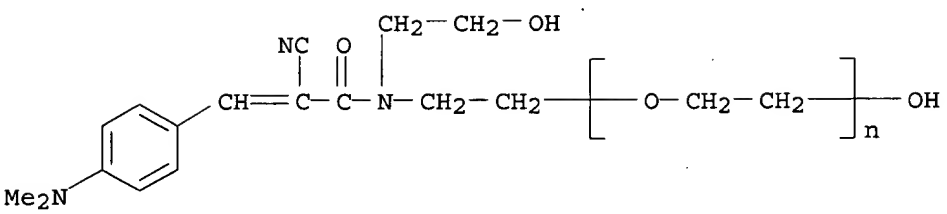
PAGE 1-A



PAGE 1-B



IT **263544-61-2P**
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(reaction in prepg. polymeric polyoxyalkylenated colorants for antireflective coatings for photoresists)
RN 263544-61-2 CAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[[2-cyano-3-[4-(dimethylamino)phenyl]-1-oxo-2-propenyl](2-hydroxyethyl)amino]ethyl]-.omega.-hydroxy- (9CI) (CA INDEX NAME)



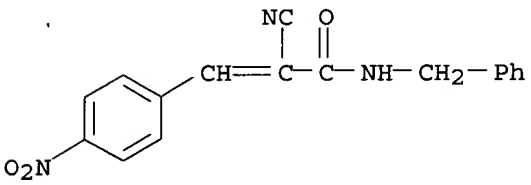
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:204069 CAPLUS
DOCUMENT NUMBER: 133:83970
TITLE: Disruption of microtubules in living cells by tyrphostin AG-1714
AUTHOR(S): Volberg, Tova; Bershadsky, Alexander D.; Elbaum, Michael; Gazit, Aviv; Levitzki, Alexander; Geiger, Benjamin
CORPORATE SOURCE: Department of Molecular Cell Biology, The Weizmann Institute of Science, Rehovot, Israel
SOURCE: Cell Motility and the Cytoskeleton (2000), 45(3), 223-234
CODEN: CMCYEO; ISSN: 0886-1544
PUBLISHER: Wiley-Liss, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

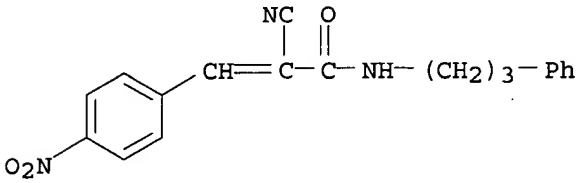
AB Tyrphostin AG-1714 and several related mols. with the general structure of nitro-benzene malononitrile (BMN) disrupt microtubules in a large variety of cultured cells. This process can be inhibited by the stabilization of microtubules with taxol or by pretreatment of the cells with pervanadate, which inhibits tyrosine phosphatases and increases the overall levels of phosphotyrosine in cells. Unlike other microtubule-disrupting drugs such as nocodazole or colchicine, tyrphostin AG-1714 does not interfere with microtubule polymn. or stability in vitro, suggesting that the effect of this tyrphostin on microtubules is indirect. These results imply an involvement of protein tyrosine phosphorylation in the regulation of overall microtubule dynamics. Tyrphostins of AG-1714 type could thus be powerful tools for the identification of such microtubule regulatory pathways.

IT **204010-55-9**, AG 1801 **204010-57-1**, AG 1798
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(disruption of microtubules in living cells by tyrphostins)

RN 204010-55-9 CAPLUS
CN 2-Propenamide, 2-cyano-3-(4-nitrophenyl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



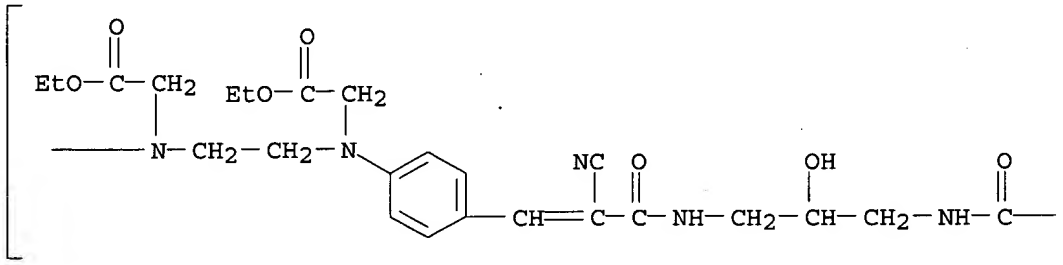
RN 204010-57-1 CAPLUS
CN 2-Propenamide, 2-cyano-3-(4-nitrophenyl)-N-(3-phenylpropyl)- (9CI) (CA INDEX NAME)



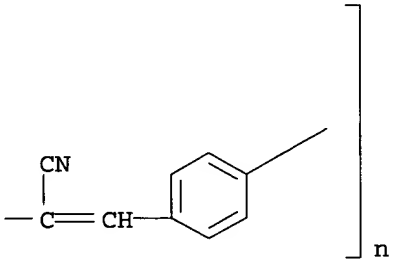
REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:168177 CAPLUS
DOCUMENT NUMBER: 130:312191
TITLE: Ordered Films by Alternating Polyelectrolyte Deposition of Cationic Side Chain and Anionic Main Chain Chromophoric Polymers
AUTHOR(S): Lindsay, G. A.; Roberts, M. J.; Chafin, A. P.; Hollins, R. A.; Merwin, L. H.; Stenger-Smith, J. D.; Yee, R. Y.; Zarras, P.; Wynne, K. J.
CORPORATE SOURCE: U. S. Navy, China Lake, CA, 93555, USA
SOURCE: Chemistry of Materials (1999), 11(4), 924-929
CODEN: CMATEX; ISSN: 0897-4756
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Using the method of aq. soln. alternating polyelectrolyte deposition (APD), second-order nonlinear optical (NLO) polymer films were prepd., in which both polymers are NLO-active. Films were prepd. by alternately coating a solid substrate with an NLO-active side chain polycation and an NLO-active main chain polyanion. This polyanion comprises .alpha.-cinnamoyl chromophores in the syndioregic configuration (an accordion polymer). The polycation was derived from poly(epichlorohydrin) that was completely substituted with a stilbazolium side chain. The films were transparent and had no texture when obsd. by polarized microscopy. The increase in intensity of the second harmonic (SH) signal generated in the films was quadratic with each mol. layer to 20 layers; beyond that, the SH signal intensity satd. as more layers were added.
IT **223678-01-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(anionic NLO accordion polymer; prepn. and alternating deposition of cationic side chain and anionic main chain chromophoric NLO polyelectrolytes)
RN 223678-01-1 CAPLUS
CN Poly[[(2-ethoxy-2-oxoethyl)imino]-1,2-ethanediyl[(2-ethoxy-2-oxoethyl)imino]-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)imino(2-hydroxy-1,3-propanediyl)imino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

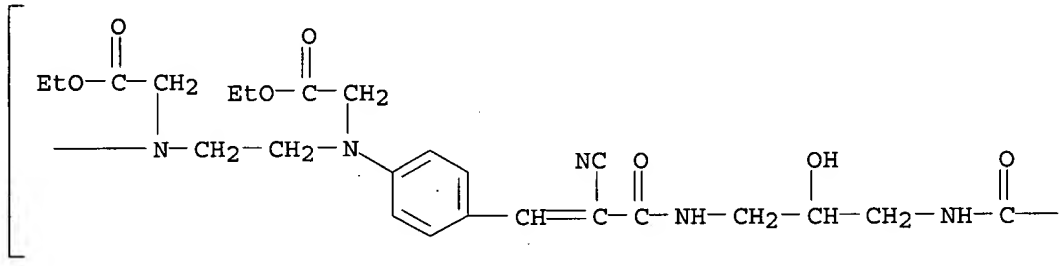


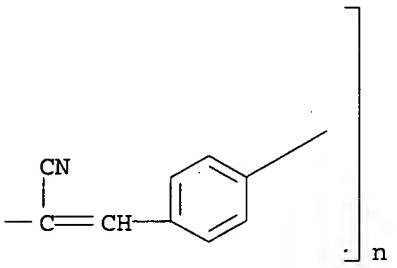
IT **223678-01-1DP**, sapond., sodium salts
RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(prepn. and alternating deposition of cationic side chain and anionic main chain chromophoric NLO polyelectrolytes)

RN 223678-01-1 CAPLUS

CN Poly[[(2-ethoxy-2-oxoethyl)imino]-1,2-ethanediyl[(2-ethoxy-2-oxoethyl)imino]-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)imino(2-hydroxy-1,3-propanediyl)imino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A





REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:618051 CAPLUS
DOCUMENT NUMBER: 129:316959
TITLE: Nonlinear optical films from pairwise-deposited semiionomeric syndioregic polymers
AUTHOR(S): Roberts, M. J.; Stenger-Smith, J. D.; Zarras, P.; Hollins, R. A.; Nadler, M.; Chafin, A. P.; Wynne, K. J.; Lindsay, G. A.
CORPORATE SOURCE: NAWC, Research and Technology Group, China Lake, CA, 93555-6100, USA
SOURCE: ACS Symposium Series (1998), 695(Organic Thin Films), 267-287
CODEN: ACSMC8; ISSN: 0097-6156
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Polar multilayer films of syndioregic nonlinear optical polymers were made using Langmuir-Blodgett-Kuhn (LBK) deposition of a polymeric salt formed at the water surface from two complementary polymers (a polycation insol. in water and a water-sol. polyanion). Polymers were prepd. by condensation of monomers 3,5-bis(N-ethyl-N-formylphenylaminomethyl)phenol and 1,2-ethylenediamine-bis-cyanoacetamide and of 2,6-dimethyl-3,5-pyridine diacetonitrile with 4,4'-[1,2-ethanediylbis[(2-hydroxyethyl)imino]]bis-benzaldehyde. Noncentrosym. order in the deposited films is maintained primarily by ionic and hydrogen bonding. An important advantage of using LBK technique to produce all-polymeric nonlinear optical films is it allows polymers to be processed near room temp. thus avoiding the disordering and degrading effects seen in high temp. elec. field poling. In addn., the LBK technique offers control over final film thickness to within one monolayer and materials may be precisely located within the film to control properties for purposes such as phase matching of the fundamental and second harmonic waveguide modes. A well-known limitation, the long-standing problem of low thermal structural stability of LBK films, may be solved by using high Tg polymers. However, a serious limitation of LBK technique remains; namely, the long processing time required to build up films of sufficient thickness (>0.5 .mu.m) for waveguiding. In principle, the pairwise deposition technique will increase the rate of film thickness growth.

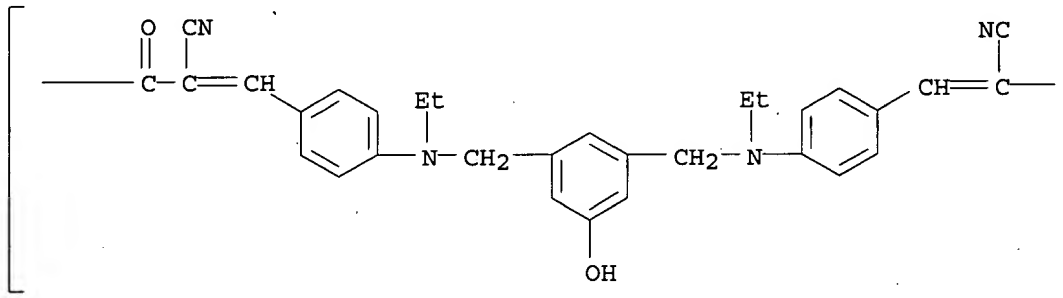
IT **214677-17-5P**, 3,5-Bis(N-ethyl-N-formylphenylaminomethyl)phenol-1,2-ethylenediamine-bis-cyanoacetamide copolymer, sru, lithium salt
RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(nonlinear optical films from pairwise-deposited semi-ionomeric

syndioregic polyamide-polyamine salts)

RN 214677-17-5 CAPLUS

CN Poly[imino-1,2-ethanediylimino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene(ethylimino)methylene(5-hydroxy-1,3-propanediyl)methylene(ethylimino)-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)], lithium salt (9CI) (CA INDEX NAME)

PAGE 1-A



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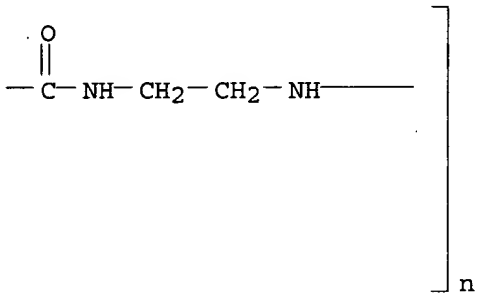
PAGE 1-B



IT **211060-95-6P**, 3,5-Bis(N-ethyl-N-formylphenylaminomethyl)phenol-1,2-ethylenediamine-bis-cyanoacetamide copolymer, sru

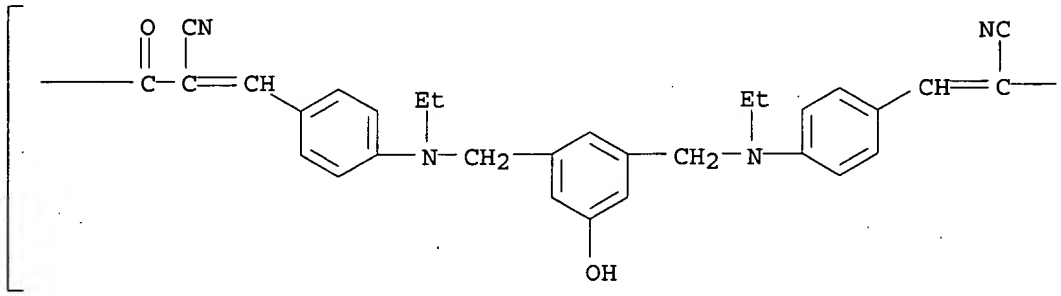
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(nonlinear optical films from pairwise-deposited semi-ionomeric syndioregic polyamide-polyamine salts)

RN 211060-95-6 CAPLUS

CN Poly[imino-1,2-ethanediylimino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene(ethylimino)methylene(5-hydroxy-1,3-propanediyl)methylene(ethylimino)-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)] (9CI) (CA INDEX NAME)

PAGE 1-A



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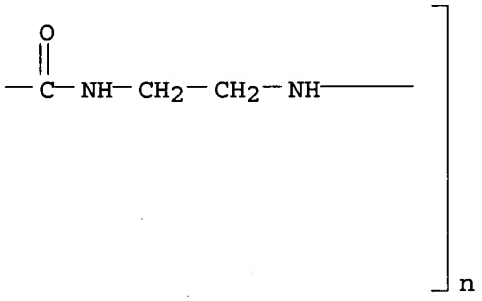


REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:563358 CAPLUS
DOCUMENT NUMBER: 129:290695
TITLE: Multilayer .chi.(2) NLO films prepared by the LBK process from novel accordion polymers
AUTHOR(S): Lindsay, Geoffrey; Wynne, Kenneth; Herman, Warren; Chafin, Andrew; Hollins, Richard; Stenger-Smith, John; Hoover, James; Cline, Jerrold; Roberts, Joseph
CORPORATE SOURCE: US Navy, NAWCWPNS, Chemistry and Materials Branch, China Lake, CA, 93555, USA
SOURCE: Advances in Nonlinear Optics (1997), 4(Poled Polymers and Their Applications to SHG and EO Devices), 77-85
CODEN: ANOPF9; ISSN: 1068-672X
PUBLISHER: Gordon & Breach Science Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Thin films of polymers having acceptor and donor moieties and second-order nonlinear optical (NLO) properties were fabricated by the Langmuir-Blodgett-Kuhn (LBK) technique. The precursor species are: N,N'-bis-(2-hydroxyethyl)-N,N'-di(4-formylphenyl)ethylenediamine donor bridge and N,N'-bisdodecylethylenediamine-bis-cyanoacetamide (B) or bishexadecylethylenediamine-bis cyanoacetamide (A) accepting bridge. Main chain polymers were designed and synthesized with chromophores in the syndioregic (head-to-head) configuration. Multilayer-(AB)n-films were fabricated from two polymers by Y-type deposition. In Polymer A, the chromophore electron donating end was connected to a relatively hydrophobic bridging unit, and its electron accepting end was connected to

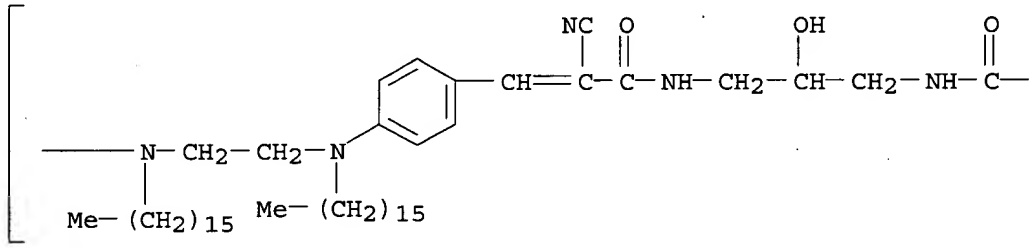
a relatively hydrophilic bridging unit. The converse was true for Polymer B. Microstructural information about these multilayer polymer films was obtained from polarized optical measurements.

IT **141823-63-4P 177606-07-4P**
RL: PNU (Preparation, unclassified); PRP (Properties); PREP (Preparation)
(multilayer .chi.(2) NLO films prepd. by LBK process from polyamide-amine accordion polymers)

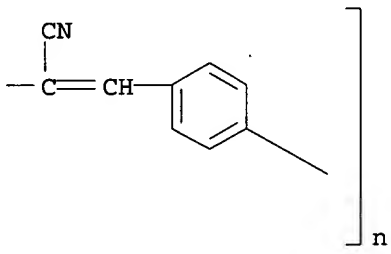
RN 141823-63-4 CAPLUS

CN Poly[(hexadecylimino)-1,2-ethanediyl(hexadecylimino)-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)imino(2-hydroxy-1,3-propanediyl)imino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



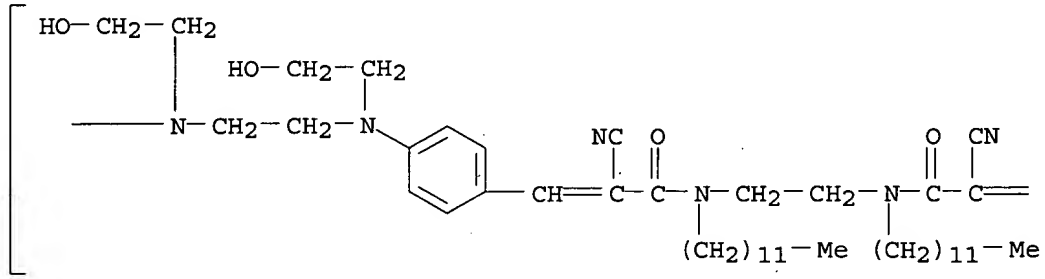
PAGE 1-B



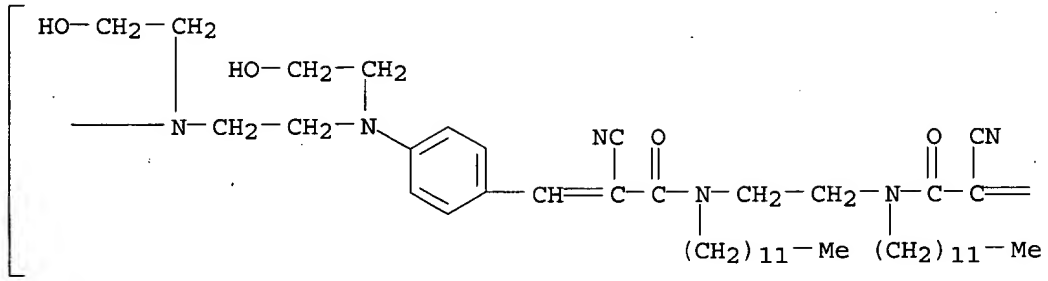
RN 177606-07-4 CAPLUS

CN Poly[[(2-hydroxyethyl)imino]-1,2-ethanediyl[(2-hydroxyethyl)imino]-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)(dodecylimino)-1,2-ethanediyl(dodecylimino)(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

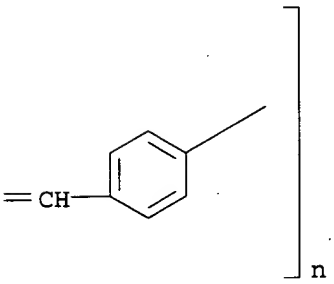
PAGE 1-A



PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 14 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:534888 CAPLUS
DOCUMENT NUMBER: 129:156926
TITLE: Methods and compositions using receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders, and inhibitor preparation
INVENTOR(S): Chen, Hui; Gazit, Aviv; Hirth, Klaus Peter; Mann, Elaina; Shawver, Laura K.; Tsai, Jianming; Tang, Peng Cho
PATENT ASSIGNEE(S): Sugen, Inc., USA; Yissum Research & Development Company of the Hebrew University of Jerusalem
SOURCE: U.S., 41 pp., Cont.-in-part of U.S. Ser. No. 207,933, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5789427	A	19980804	US 1995-399967	19950307
US 5773476	A	19980630	US 1995-486775	19950607

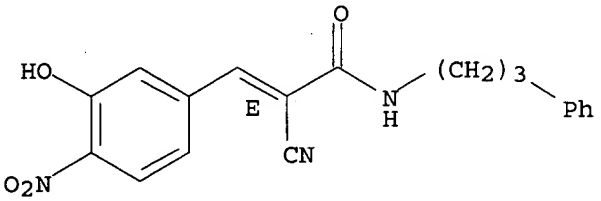
PRIORITY APPLN. INFO.: US 1994-207933 19940307
US 1995-399967 19950307
OTHER SOURCE(S): MARPAT 129:156926
AB The invention concerns compds. and their use to inhibit the activity of a

receptor tyrosine kinase. The invention is preferably used to treat cell proliferative disorders, e.g. cancers characterized by over-activity or inappropriate activity HER2 or EGFR.

IT **170449-11-3**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

RN 170449-11-3 CAPLUS
CN 2-Propenamide, 2-cyano-3-(3-hydroxy-4-nitrophenyl)-N-(3-phenylpropyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



REFERENCE COUNT: 90 THERE ARE 90 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

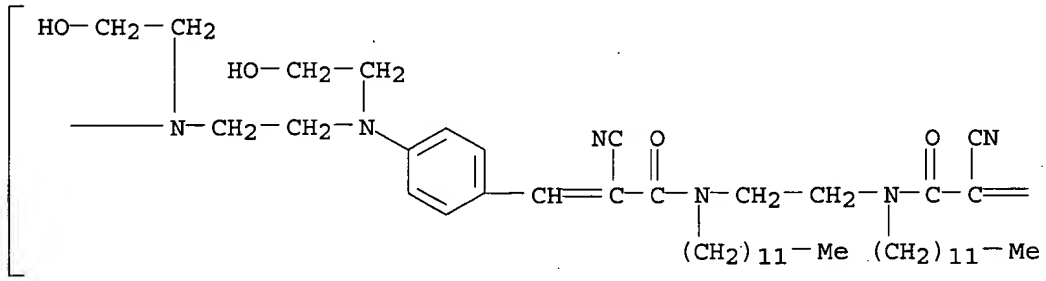
L4 ANSWER 15 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:532399 CAPLUS
DOCUMENT NUMBER: 129:261089
TITLE: Persistent in-plane order through 90 bilayers in an accordion polymer LB film
AUTHOR(S): Herman, W. N.; Roberts, M. J.; Stenger-Smith, J. D.; Chafin, A. P.; Hollins, R. A.; Lindsay, G. A.; Wynne, K. J.
CORPORATE SOURCE: EO Sensors Branch, U.S. Navy, NAWC AD, MD, 20607, USA
SOURCE: Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1998), 39(2), 1105-1106
CODEN: ACPPAY; ISSN: 0032-3934
PUBLISHER: American Chemical Society, Division of Polymer Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

AB From SHG azimuthal data on 20,40, and 90 bilayer ABAB... Y-type accordion polymer LB films, where both polymers contain 12 carbon lipophilic chains, in-plane order assocd. with the mm2 point group is found that persists even at 90 bilayers, as well as a quadratic dependence of the generated second harmonic on the no. of bilayers. A simple mol. model that provides a sufficient condition for observing point group mm2 is presented.

IT **177606-07-4 213699-25-3**
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(persistent in-plane order through 90 bilayers in accordion polymer Langmuir-Blodgett film)

RN 177606-07-4 CAPLUS
CN Poly[[(2-hydroxyethyl)imino]-1,2-ethanediyl[(2-hydroxyethyl)imino]-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)(dodecylimino)-1,2-ethanediyl(dodecylimino)(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



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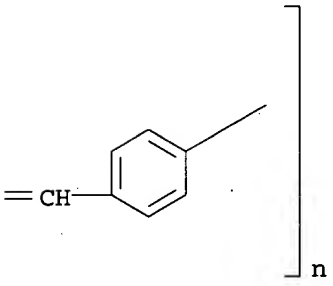
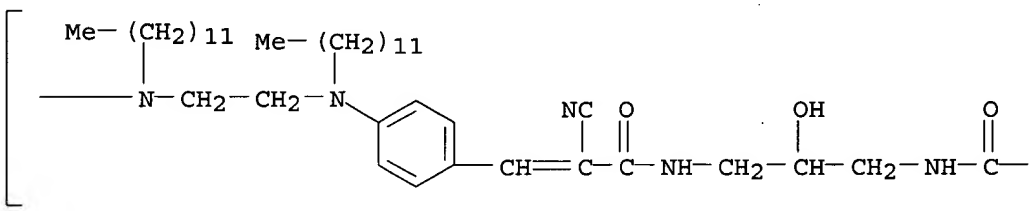


RN 213699-25-3 CAPLUS
CN Poly[(dodecylimino)-1,2-ethanediyl(dodecylimino)-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)imino(2-hydroxy-1,3-propanediyl)imino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



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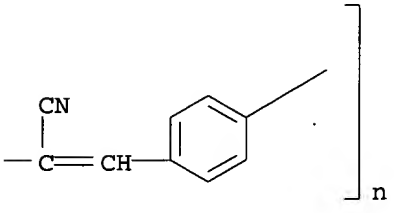

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:527389 CAPLUS
DOCUMENT NUMBER: 129:167911
TITLE: Nonlinear optical films from pairwise-deposited semi-ionomeric syndioregic polymers
INVENTOR(S): Lindsay, Geoffrey A.; Wynne, Kenneth J.; Smith, John D. Stenger; Chafin, Andrew P.; Hollins, Richard A.; Roberts, Marion J.; Zarras, Peter
PATENT ASSIGNEE(S): United States Dept. of the Navy, USA
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9832813	A1	19980730	WO 1997-US23990	19971222
W: JP, KP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5882785	A	19990316	US 1997-800943	19970123

PRIORITY APPLN. INFO.: US 1997-800943 19970123

AB Polarized films are described which comprise asym. chromophores linked head-to-head by alternating two different kinds of bridging groups. One of the bridging groups contains one or more ionic groups, and the other bridging group contains one or more non-ionic, hydrophilic groups. The chromophores may be nonlinear optical chromophores. Langmuir-Blodgett (LB) film deposition methods are also described in which a layer of a nonaq. soln. of one polymer is spread on a subphase of an aq. soln. of the other in a Langmuir-Blodgett trough, a mol. bilayer of the two polymers is allowed to form by waiting 1-60 min, and the bilayer is then compressed while maintaining a gas-liq. surface pressure of 20-90% of the min. pressure required to collapse the bilayer; a multilayered film may then be formed by repeated dipping of a substrate. An electrooptical film which has never undergone elec.-field poling nor high temp. treatment may be produced. This eliminates the diln. effect of the long hydrophobic alkyl groups, and creates stronger ionic bonds between the polymer chains and reduces the time to make a film of a given thickness by at least half by virtue of depositing two polymer layers per stroke.

IT **211060-95-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(nonlinear optical films from pairwise-deposited semiionomeric syndioregic polymers)

RN 211060-95-6 CAPLUS
CN Poly[imino-1,2-ethanediylimino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene(ethylimino)methylene(5-hydroxy-1,3-propanediyl)methylene(ethylimino)-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)] (9CI) (CA INDEX NAME)

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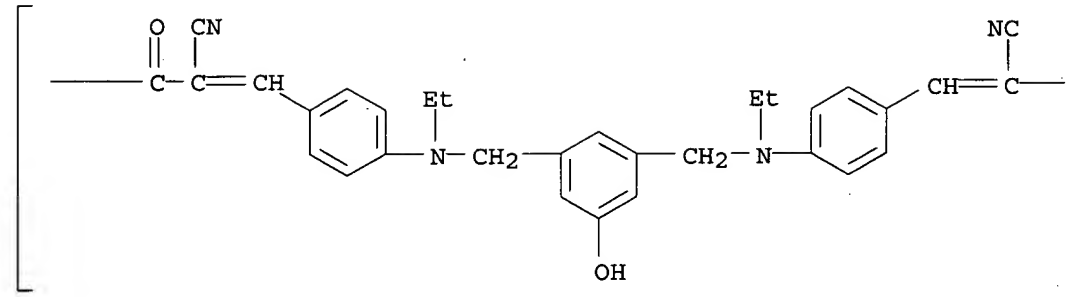
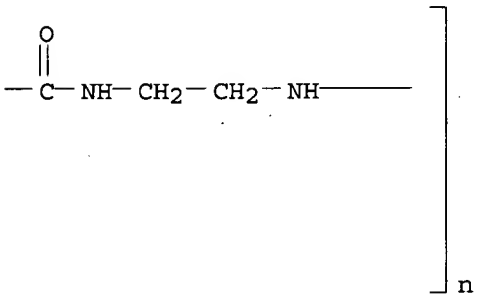


PAGE 1-B

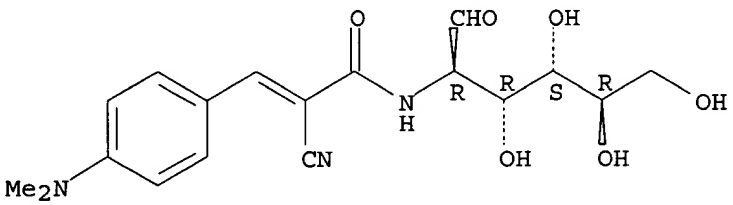


REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:519780 CAPLUS
DOCUMENT NUMBER: 129:257184
TITLE: Fluorescent molecular rotors with specific hydrophilic functions: glucosamine and inositol derivatives
AUTHOR(S): Carre, M. C.; Geoffroy-Chapotot, C.; Adibnejad, M.; Berroy, P.; Stoltz, J. F.; Viriot, M. L.
CORPORATE SOURCE: DCPR-GRAPP-UMR 7630 CNRS, ENSIC-INPL, Nancy, F-54001, Fr.
SOURCE: Journal of Fluorescence (1998), 8(1), 53-57
CODEN: JOFLEN; ISSN: 1053-0509
PUBLISHER: Plenum Publishing Corp.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB New fluorescent mol. rotors having hydrophilic functional groups (such as a sugar or an inositol group) were synthesized. The aim was to obtain impermeant and uncharged probes, with a defined orientation within a model membrane bilayer or in a cell membrane. Their fluorescence properties, which are dependent on solvent polarity and viscosity, were successfully applied to characterize organized media: for example, the CMC of surfactants and the transition temp. of DPPC liposomes were evaluated.
IT **213603-31-7P**
RL: ARU (Analytical role, unclassified); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)
(glucosamine and inositol derivs. as fluorescent mol. rotors with specific hydrophilic functions)
RN 213603-31-7 CAPLUS

CN D-Glucose, 2-[[2-cyano-3-[4-(dimethylamino)phenyl]-1-oxo-2-propenyl]amino]-2-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



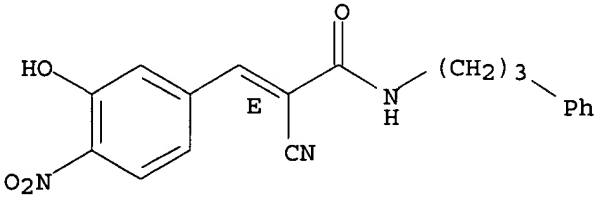
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 18 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:400243 CAPLUS
DOCUMENT NUMBER: 129:156456
TITLE: Inhibition of Cdk2 activation by selected tyrphostins causes cell cycle arrest at late G1 and S phase
AUTHOR(S): Kleinberger-Doron, Nurit; Shelah, Noa; Capone, Ricardo; Gazit, Aviv; Levitzki, Alexander
CORPORATE SOURCE: Department of Biological Chemistry, Institute of Life Sciences, The Hebrew University of Jerusalem, Jerusalem, 91904, Israel
SOURCE: Experimental Cell Research (1998), 241(2), 340-351
CODEN: ECREAL; ISSN: 0014-4827
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The authors have previously reported that certain tryphostins which block EGF-R phosphorylation in cell-free systems fail to do so in intact cells. Nevertheless, the authors found that this family of tyrphostins inhibits both EGF- and calf serum-induced cell growth and DNA synthesis [Osherov, N.A., Gazit, C., Gilon, and Levitzki, A. (1993). Selective inhibition of the EGF and HER2/Neu receptors by Tyrphostins. J. Biol. Chem. 268, 11134-11142.]; now the authors show that these tryphostins exert their inhibitory activity even when added at a time when the cells have already passed their restriction point and receptor activation is no longer necessary. AG555 and AG556 arrest 85% of the cells at late G1, whereas AG490 and AG494 cause cells to arrest at late G1 and during S phase. No arrest occurs during G2 or M phase. Further anal. revealed that these tyrphostins act by inhibiting the activation of the enzyme Cdk2 without affecting its levels or its intrinsic kinase activity. Furthermore, they do not alter the assocn. of Cdk2 to cyclin E or cyclin A or to the inhibitory proteins p21 and p27. These compds. also have no effect on the activating phosphorylation of Cdk2 by Cdk2 activating kinase (CAK) and no effect on the catalytic domain of cdc25 phosphatase. These compds. lead to the accumulation of phosphorylated Cdk2 on tyrosine 15 which is most probably the cause for its inhibition leading to cell cycle arrest at G1/S. A structure-activity relation study defines a very precise pharmacophore, suggesting a unique mol. target not yet identified and which is most probably involved in the regulation of the tyrosine-phosphorylated state of Cdk2. These compds. represent a new class of cell proliferation blockers whose target is Cdk2 activation. (c) 1998 Academic Press.

IT **170449-11-3**, AG 1580
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(inhibition of Cdk2 activation by selected tyrphostins causes cell cycle arrest at late G1 and S phase in relation to tyrosine phosphorylation and structure)
RN 170449-11-3 CAPLUS
CN 2-Propenamide, 2-cyano-3-(3-hydroxy-4-nitrophenyl)-N-(3-phenylpropyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 19 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:124002 CAPLUS
DOCUMENT NUMBER: 128:213385
TITLE: Tyrphostins for countering undesired toxic effects to cells, tissues, or organs from neoplasm inhibitors or other harmful agents, preparation, and pharmaceutical compositions containing them
INVENTOR(S): Novogrodsky, Abraham; Levitzki, Alexander; Gazit, Aviv
PATENT ASSIGNEE(S): Mor-Research Applications Ltd., Israel; Yissum Research Development Company of the Hebrew University of Jerusalem; Novogrodsky, Abraham; Levitzki, Alexander; Gazit, Aviv
SOURCE: PCT Int. Appl., 92 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9806391	A1	19980219	WO 1997-IL276	19970814
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9737822	A1	19980306	AU 1997-37822	19970814
AU 728672	B2	20010118		
EP 923371	A1	19990623	EP 1997-934696	19970814
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

CN 1232392	A	19991020	CN 1997-198596		19970814
BR 9711160	A	20000111	BR 1997-11160		19970814
JP 2001504085	T2	20010327	JP 1998-509558		19970814
US 2003013748	A1	20030116	US 2002-141086		20020509
PRIORITY APPLN. INFO.:			IL 1996-119069	A	19960814
			WO 1997-IL276	W	19970814
			US 1999-242342	A1	19990407

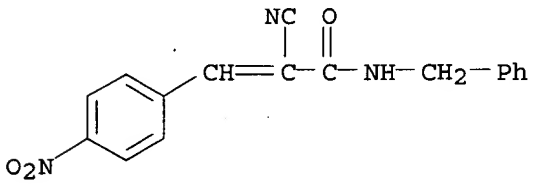
OTHER SOURCE(S): MARPAT 128:213385

AB Compds. useful for countering undesired toxic effects to cells, tissues or organs include Ar(NH)nCH=(R)CN (Ar is e.g. substituted Ph; n = 0, 1; R = CN, -C(S)NH2, etc.). The compns. and methods of the invention are useful in countering damage caused by harmful agents (including chem. agents and radiation), particularly antineoplastic agents.

IT **204010-55-9P**, AG 1801 **204010-57-1P**, AG 1798
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tyrphostins for countering undesired toxic effects to cells, tissues, or organs from neoplasm inhibitors or other harmful agents, prepn., and pharmaceutical compns.)

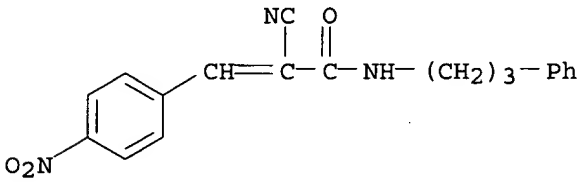
RN 204010-55-9 CAPLUS

CN 2-Propenamide, 2-cyano-3-(4-nitrophenyl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 204010-57-1 CAPLUS

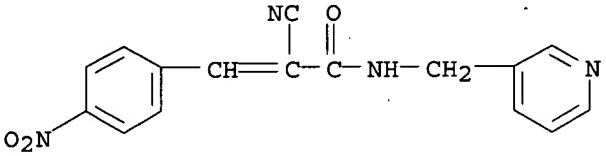
CN 2-Propenamide, 2-cyano-3-(4-nitrophenyl)-N-(3-phenylpropyl)- (9CI) (CA INDEX NAME)



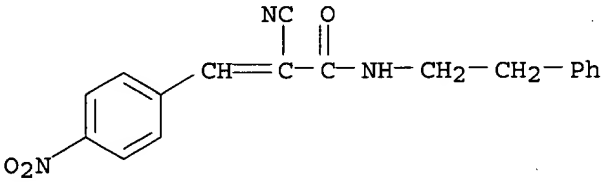
IT **204010-64-0**, AG 1824 **204010-65-1**, AG 1823
204010-66-2, AG 1745 **204010-68-4**, AG 1606
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tyrphostins for countering undesired toxic effects to cells, tissues, or organs from neoplasm inhibitors or other harmful agents, prepn., and pharmaceutical compns.)

RN 204010-64-0 CAPLUS

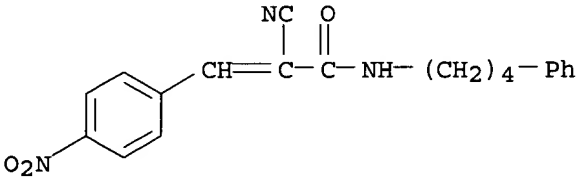
CN 2-Propenamide, 2-cyano-3-(4-nitrophenyl)-N-(3-pyridinylmethyl)- (9CI) (CA INDEX NAME)



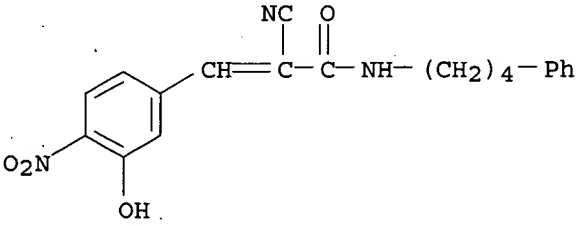
RN 204010-65-1 CAPLUS
CN 2-Propenamide, 2-cyano-3-(4-nitrophenyl)-N-(2-phenylethyl)- (9CI) (CA INDEX NAME)



RN 204010-66-2 CAPLUS
CN 2-Propenamide, 2-cyano-3-(4-nitrophenyl)-N-(4-phenylbutyl)- (9CI) (CA INDEX NAME)



RN 204010-68-4 CAPLUS
CN 2-Propenamide, 2-cyano-3-(3-hydroxy-4-nitrophenyl)-N-(4-phenylbutyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 20 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:752789 CAPLUS
DOCUMENT NUMBER: 128:55406

09772617

TITLE: Nonsubliming mid-UV dyes for ultrathin organic antireflection coatings having differential solubility
INVENTOR(S): Meador, Jim D.; Shao, Xie; Krishnamurthy, Vandana; Murphy, Earnest C.; Flaim, Tony D.; Brewer, Terry Lowell
PATENT ASSIGNEE(S): Brewer Science, Inc., USA
SOURCE: U.S., 10 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5688987	A	19971118	US 1994-336340	19941109
US 5892096	A	19990406	US 1996-598711	19960208

PRIORITY APPLN. INFO.: US 1994-336340 19941109
OTHER SOURCE(S): MARPAT 128:55406

AB Mid-UV dyes for ultrathin antireflection coatings for multilayer i-line photoetching are produced from bichalcones, bis-a-cyanoacrylates/biscyanoacrylamides, and 1,4-divinylbenzenes. The dyes are nonsubliminal and differentially insol. in std. photoresist solvents.

IT **200007-30-3**
RL: TEM (Technical or engineered material use); USES (Uses)
(mid-UV dye for antireflection coatings for photolithog.)

RN 200007-30-3 CAPLUS
CN 2-Propenamide, N,N'-(2-methyl-1,5-pentanediyl)bis[2-cyano-3-[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)

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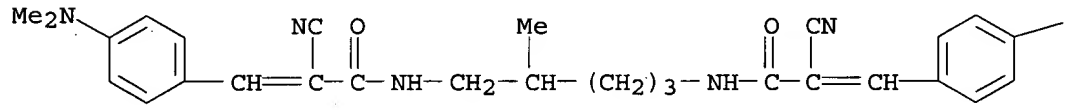


PAGE 1-B

—NMe_2

L4 ANSWER 21 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:377520 CAPLUS
DOCUMENT NUMBER: 125:127287
TITLE: Multilayer second-order nonlinear optical films of head-to-head, mainchain chromophoric polymers
INVENTOR(S): Wynne, Kenneth J.; Lindsay, Geoffrey A.; Hoover, James M.; Stenger Smith, John; Henry, Deceased Ronald A.; Chafin, Andrew P.
PATENT ASSIGNEE(S): United States Dept. of the Navy, USA
SOURCE: U.S., 26 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5520968	A	19960528	US 1995-435913	19950505
WO 9634928	A1	19961107	WO 1995-US12334	19950721
W: JP, KR, SG				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 824576	A1	19980225	EP 1995-935144	19950721
EP 824576	B1	20001213		
R: DE, DK, FR, GB, IT, NL, SE				
JP 11511866	T2	19991012	JP 1995-533270	19950721

PRIORITY APPLN. INFO.: US 1995-435913 A 19950505
WO 1995-US12334 W 19950721

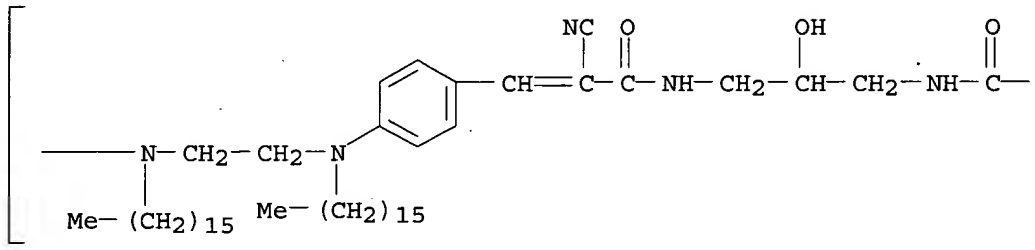
AB Second-order nonlinear optical polymeric films are described which include alternating mol. layers of two head-to-head, mainchain, amphiphilic, chromophoric polymers, one polymer having the electron donating end of the chromophore attached to hydrophilic groups, and the other polymer having the electron donating end of the chromophore attached to hydrophobic groups, and methods of fabricating the films for use in optonics.

IT **141823-63-4P 177606-07-4P 179618-94-1P**
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(multilayer second-order nonlinear optical films of head-to-head chromophoric polymers)

RN 141823-63-4 CAPLUS

CN Poly[(hexadecylimino)-1,2-ethanediyl(hexadecylimino)-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)imino(2-hydroxy-1,3-propanediyl)imino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



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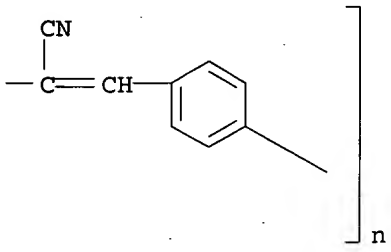
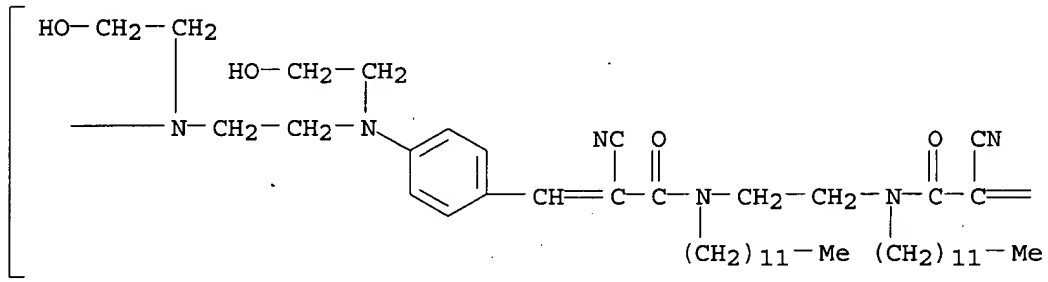


RN 177606-07-4 CAPLUS
CN Poly[[(2-hydroxyethyl)imino]-1,2-ethanediyl[(2-hydroxyethyl)imino]-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)(dodecylimino)-1,2-ethanediyl(dodecylimino)(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



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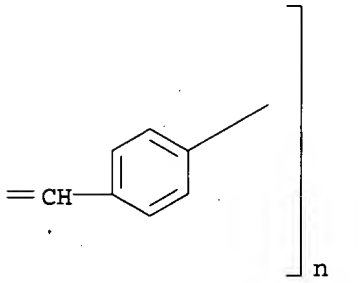
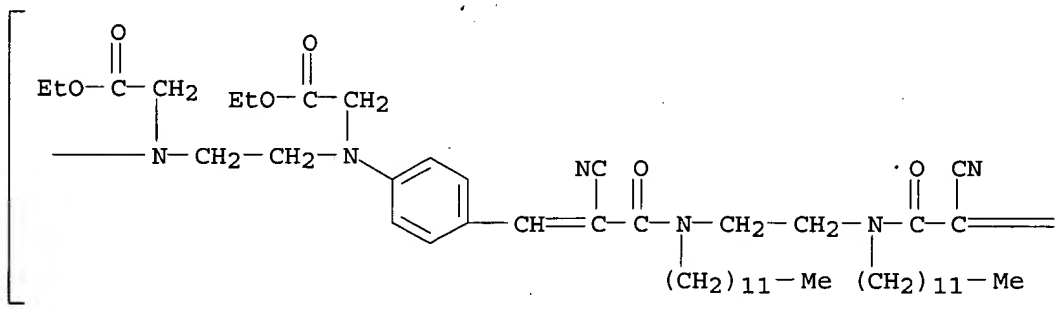
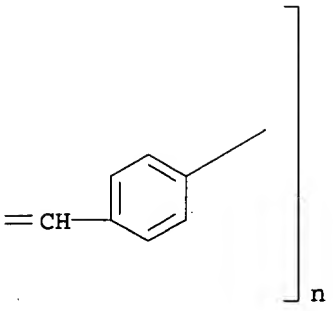


RN 179618-94-1 CAPLUS
CN Poly[[(2-ethoxy-2-oxoethyl)imino]-1,2-ethanediyl[(2-ethoxy-2-oxoethyl)imino]-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)(dodecylimino)-1,2-ethanediyl(dodecylimino)(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



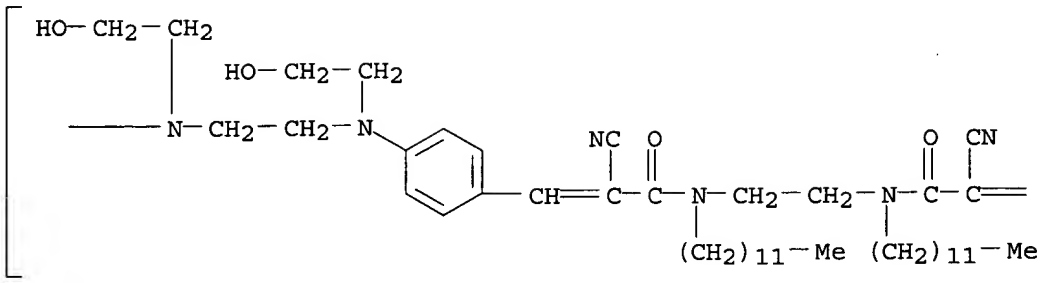


L4 ANSWER 22 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:247181 CAPLUS
DOCUMENT NUMBER: 125:12289
TITLE: Multilayer .chi.(2) NLO films prepared by the LBK process from novel accordion polymers
AUTHOR(S): Lindsay, Geoffrey; Wynne, Kenneth; Herman, Warren; Chafin, Andrew; Hollins, Richard; Stenger-Smith, John; Hoover, James; Cline, Jerrold; Roberts, Joseph
CORPORATE SOURCE: Chem. Mater. Branch, U.S. Navy, China Lake, CA, 93555, USA
SOURCE: MCLC S&T, Section B: Nonlinear Optics (1996), 15(1-4), 139-46
CODEN: MCLOEB; ISSN: 1058-7268
PUBLISHER: Gordon & Breach
DOCUMENT TYPE: Journal
LANGUAGE: English

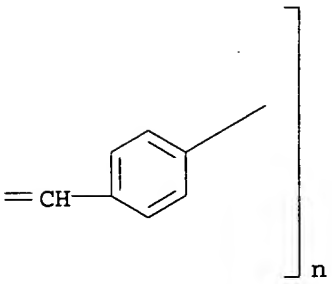
AB Prepn. and second-order nonlinear optical (NLO) properties of polymeric thin films fabricated by the Langmuir-Blodgett-Kuhn (LBK) technique are reported. Main chain polymers were designed and synthesized with chromophores in the syndioregic configuration. Multilayer -(AB)n- films were fabricated from 2 polymers by Y-type deposition. In polymer A, the chromophore's electron accepting end was connected to a hydrophobic bridging unit and its electron donating end was connected to a hydrophilic bridging unit. The converse was true for polymer B. Microstructural information about these multilayers were obtained from polarized optical measurements.

IT **177606-07-4P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and second-order nonlinear optical properties of multilayer harmonic polymer thin films)
RN 177606-07-4 CAPLUS
CN Poly[[(2-hydroxyethyl)imino]-1,2-ethanediyl[(2-hydroxyethyl)imino]-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)(dodecylimino)-1,2-ethanediyl(dodecylimino)(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A

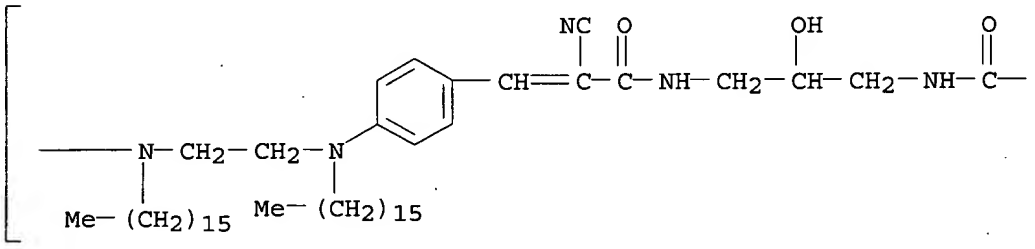


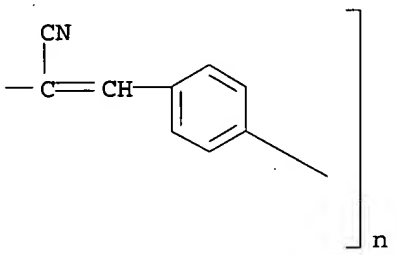
PAGE 1-B



IT **141823-63-4**
RL: PRP (Properties)
(second-order nonlinear optical properties of multilayer harmonic polymer thin films)
RN 141823-63-4 CAPLUS
CN Poly[(hexadecylimino)-1,2-ethanediyl(hexadecylimino)-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)imino(2-hydroxy-1,3-propanediyl)imino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A





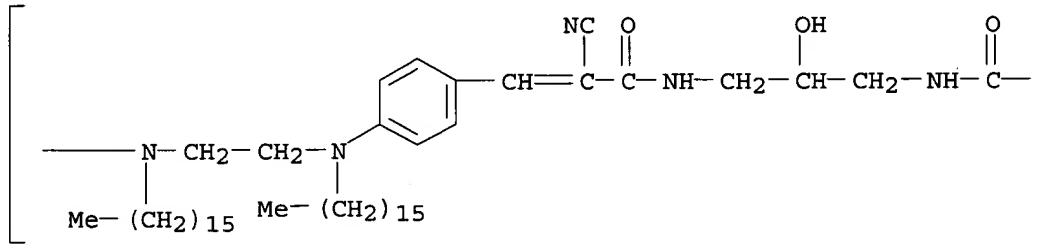
L4 ANSWER 23 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:247170 CAPLUS
DOCUMENT NUMBER: 125:12033
TITLE: Study on conformations of polymeric Langmuir-Blodgett films prepared by using Kuhn type and moving wall type deposition systems
AUTHOR(S): Talukder, M.; Fujita, S.; Watanabe, T.; Stenger-Smith, J.; Lindsay, G.; Wynne, K.; Miyata, S.
CORPORATE SOURCE: Chem. Mater. Branch, U.S. Navy, China Lake, CA, 93555, USA
SOURCE: MCLC S&T, Section B: Nonlinear Optics (1996), 15(1-4), 77-80
CODEN: MCLOEB; ISSN: 1058-7268
PUBLISHER: Gordon & Breach
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Thin polymer films prepd. by Kuhn type deposition using a typical accordion polymer, -(-N((CH2)15Me)CH2CH2N((CH2)15Me)-p-C6H4-CH=C(CN)CONHCH2CH(OH)CH2NHCOC(CN)=CH-p-C6H4-)-n, did not show any second harmonic generation (SHG), whereas thin films obtained by moving wall type deposition under similar conditions gave strong SHG. The discrepancy may be explained by a conformational change of the thin films during the deposition in the moving wall type Langmuir-Blodgett trough. Calcd. values of the .beta.-hyperpolarizability of a single chain stable conformation of the polymer agreed closely with exptl. results.

IT **141823-63-4**
RL: PRP (Properties)
(second harmonic generation and conformation modeling of syndioregic polyamide-polyamine films deposited by different Langmuir-Blodgett methods)

RN 141823-63-4 CAPLUS
CN Poly[(hexadecylimino)-1,2-ethanediyl(hexadecylimino)-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)imino(2-hydroxy-1,3-propanediyl)imino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



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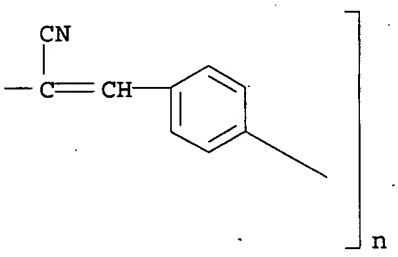

L4 ANSWER 24 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:926425 CAPLUS
DOCUMENT NUMBER: 123:329984
TITLE: Receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders
INVENTOR(S): Chen, Hui; Gazit, Aviv; Hirth, Klaus Peter; Levitzki, Alex; Mann, Elaina; Shawver, Laura K.; Tsai, Jianming; Tang, Peng Cho
PATENT ASSIGNEE(S): Sugen, Inc., USA; Yissum Research Development Co.
SOURCE: PCT Int. Appl., 121 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9524190	A2	19950914	WO 1995-US2826	19950306
WO 9524190	A3	19951109		
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TT, UA				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9520968	A1	19950925	AU 1995-20968	19950306
PRIORITY APPLN. INFO.:			US 1994-207933	19940307
			WO 1995-US2826	19950306

OTHER SOURCE(S): MARPAT 123:329984

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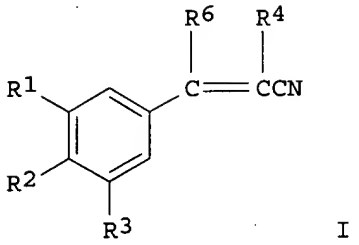


I

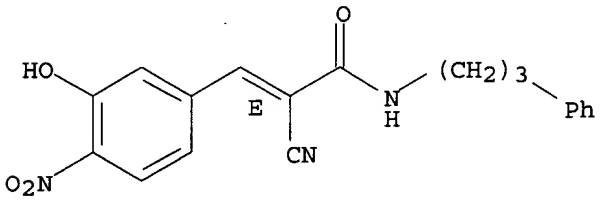
AB Receptor tyrosine kinase inhibitors I [R1-R3, R6 = alkyl, alkenyl, alkynyl, alkoxy, OH, amino, SH, alkylthio, halo, H, NO2, etc.; R4 = C(S)NHR5, C(O)NHR5, SO2YR5; Y = single bond, C(CN):CH:CH, azaalkyl; R5 = (substituted) aralkyl, CN] and II [R7-R10 = R1-R3 above; R12 = C(O)Me, C(S)Me, C(O)CF3, C(S)CF3; R13 = aryl, alkylaryl] are prepd. for use in treating cell proliferative disorders such as cancers characterized by overactivity or inappropriate activity of HER2 receptors or EGF receptors. Thus, I [R1, R2 = OH, R3 = I, R4 = C(O)NH(CH2)3Ph, R6 = H] (III) was prepd. in 2 steps by condensation of 5-iodovanillin with N-(3-phenylpropyl)cyanoacetamide. III inhibited EGF receptor kinase activity in EGC7 cells, HER2 kinase activity in BT-474 cells, and platelet-derived growth factor receptor kinase .beta. activity with an IC50 of 4, 18, and 35 .mu.M, resp., and inhibited growth of SKBR3 and SKOV3 cells in vitro at IC50 9 and 4.5 .mu.M, resp.

IT **170449-11-3P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders)

RN 170449-11-3 CAPLUS

CN 2-Propenamide, 2-cyano-3-(3-hydroxy-4-nitrophenyl)-N-(3-phenylpropyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L4 ANSWER 25 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:782006 CAPLUS
DOCUMENT NUMBER: 123:179478
TITLE: SSI tyrphostin pharmaceuticals.
INVENTOR(S): Levitzki, Alexander; Novogrodsky, Abraham; Gazit, Aviv
PATENT ASSIGNEE(S): Yissum Research Development Company, Israel; Kupot-Holim Health Insurance Institute
SOURCE: PCT Int. Appl., 47 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9514464	A1	19950601	WO 1994-US13535	19941123
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN				
RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
IL 107736	A1	20010111	IL 1993-107736	19931124
CA 2177289	AA	19950601	CA 1994-2177289	19941123
AU 9512935	A1	19950613	AU 1995-12935	19941123
AU 702800	B2	19990304		
EP 731697	A1	19960918	EP 1995-904123	19941123
EP 731697	B1	20010418		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 10504014	T2	19980414	JP 1994-515214	19941123
AT 200618	E	20010515	AT 1995-904123	19941123

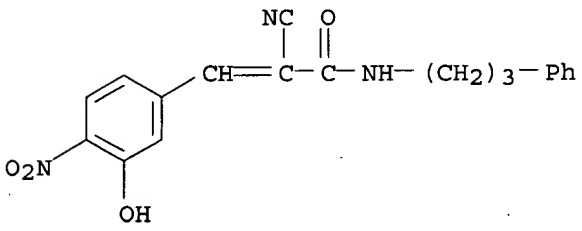
PRIORITY APPLN. INFO.: IL 1993-107736 A 19931124
WO 1994-US13535 W 19941123

OTHER SOURCE(S): MARPAT 123:179478

AB SSI tyrphostins are useful in preventing LPS-induced toxicity, TNF.alpha.-induced toxicity, LPS-induced increases in TNF.alpha. levels, nitric oxide prodn., and the treatment of septic shock and various immune disorders. A SSI tyrphostin was prepd. by the condensation of 2-cyano-N-(3-phenylpropyl)acetamide with p-nitrobenzaldehyde in the presence of .beta.-alanine in EtOH. The effectiveness of the tyrphostin in preventing lipopolysaccharide-induced toxicity was demonstrated in mice.

IT **167493-21-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(SSI tyrphostin pharmaceuticals for treatment of immune disorders LPS-induced toxicity prevention)

RN 167493-21-2 CAPLUS
CN 2-Propenamide, 2-cyano-3-(3-hydroxy-4-nitrophenyl)-N-(3-phenylpropyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 26 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:24923 CAPLUS

09772617

DOCUMENT NUMBER: 122:82484
TITLE: A new class of mainchain chromophoric nonlinear optical polymers
AUTHOR(S): Lindsay, G. A.; Stenger-Smith, J. D.; Henry, R. A.; Hoover, J. M.; Kubin, R. F.
CORPORATE SOURCE: Research Department, Naval Weapons Center, China Lake, CA, USA
SOURCE: Sagamore Army Materials Research Conference Proceedings (1992), Volume Date 1991, 38TH(ELECTROMAGNETIC, ELECTRO-OPTICAL AND ELECTRONIC MATERIALS), 215-21
CODEN: SAMPD2; ISSN: 0197-2790
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A new class of mainchain nitrile-contg. and fatty- and nitrile-contg. polyamine-polyamide-polyacetylenes and nitrile-contg. polyamine-polyester-polyacetylenes, namely head-to-head polymers connected with various flexible spacers (which may allow the dipoles to align) was developed. The synthesis and characterization of these new materials is described. The nonlinear optical properties of several of this new class of mainchain nonlinear optical polymers were compared to the properties of the head-to-tail mainchain polymers.

IT **141823-62-3P 141823-63-4P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and properties of mainchain chromophoric nonlinear optical polymers)

RN 141823-62-3 CAPLUS
CN Poly[(ethylimino)-1,6-hexanediyl(ethylimino)-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)imino-1,6-hexanediylimino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

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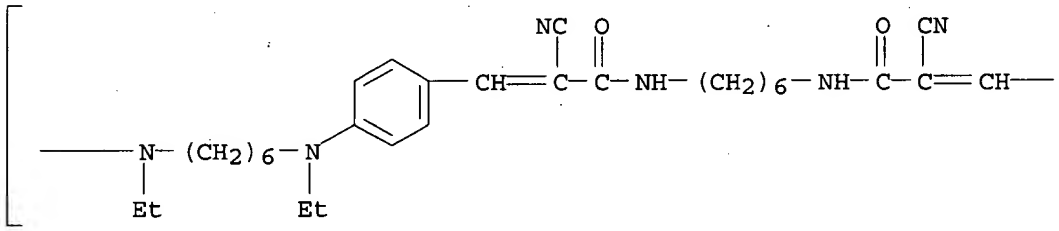

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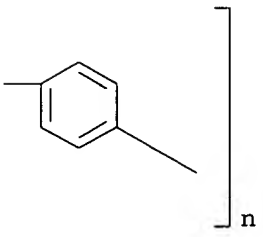

RN 141823-63-4 CAPLUS
CN Poly[(hexadecylimino)-1,2-ethanediyl(hexadecylimino)-1,4-phenylene(2-cyano-

3-oxo-1-propene-1,3-diyl)imino(2-hydroxy-1,3-propanediyl)imino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

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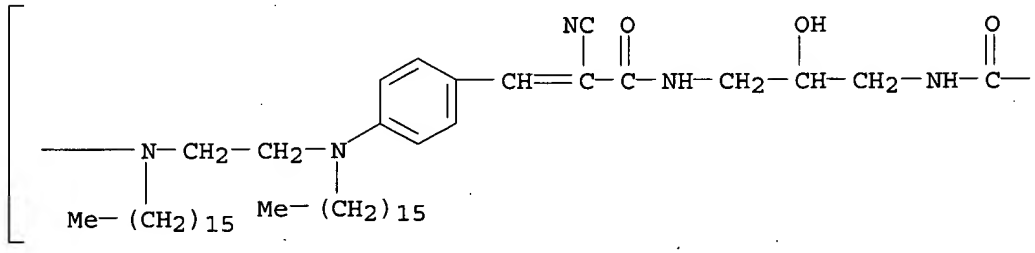

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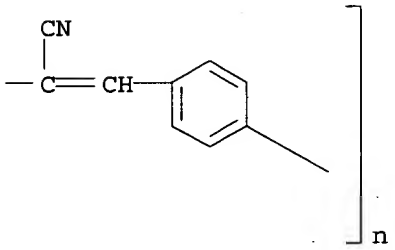
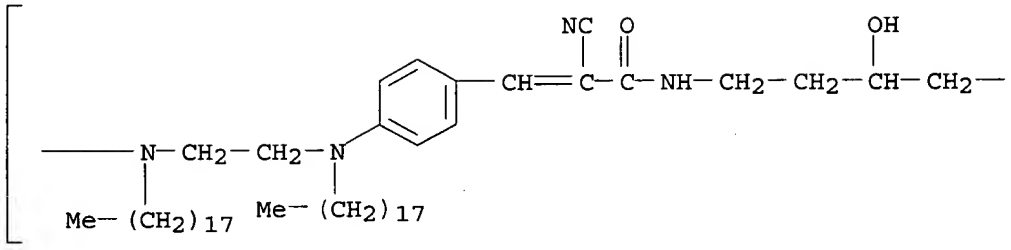


L4 ANSWER 27 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:458115 CAPLUS
DOCUMENT NUMBER: 121:58115
TITLE: Amphiphilic polymers with syndioregic main chains for second-order nonlinear optical investigations
AUTHOR(S): Hoover, J. M.; Henry, R. A.; Lindsay, G. A.; Nee, S. F.; Stenger-Smith, J. D.
CORPORATE SOURCE: Res. Dep., Nav. Air Warf. Cent. Weapons Div., China Lake, CA, 93555-6001, USA
SOURCE: Special Publication - Royal Society of Chemistry (1993), 137(Organic Materials for Non-linear Optics III), 40-9
CODEN: SROCDO; ISSN: 0260-6291
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The title polymers were obtained from fluorocarbon diols and bis(cyanocinnamic) comonomers and from ethylenediaminedibenzldehydes and alkylenebis(picolinium bromides) or a bis(cyanoacetic acid amide). Pressure-area isotherms of all 5 polymers were presented. Second harmonic generation was noted for one of the fluoropolymer-polyesters.
IT **156232-89-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and characterization of)
RN 156232-89-2 CAPLUS
CN Poly[(octadecylimino)-1,2-ethanediyl(octadecylimino)-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)imino(3-hydroxy-1,5-pentanediyl)imino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



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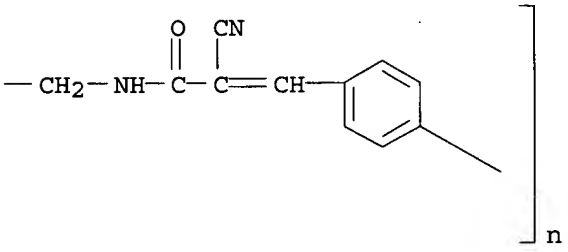


L4 ANSWER 28 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:271515 CAPLUS
DOCUMENT NUMBER: 120:271515
TITLE: Accordion-like polymers for nonlinear applications
INVENTOR(S): Stenger-Smith, John D.; Henry, Ronald; Hoover, James; Lindsay, Geoffrey; Fischer, John; Wynne, Kenneth J.
PATENT ASSIGNEE(S): USA
SOURCE: U.S., 18 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

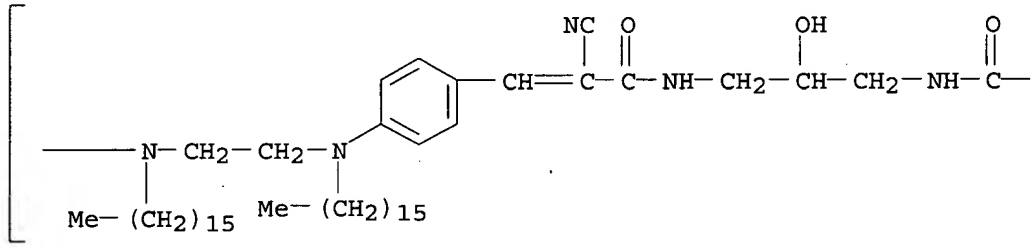
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5247055	A	19930921	US 1992-856437	19920320

PRIORITY APPLN. INFO.: US 1992-856437 19920320

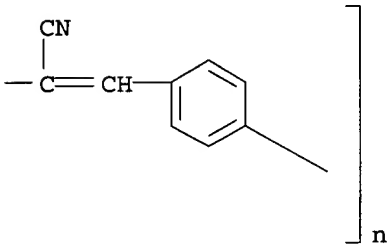
AB H2O-insol., org.-sol. title polymers have .gtoreq.2 sequences of repeat units -Z1YZ2Y- where Z1 and Z2 are bridging units and Y is a chromophoric unit consisting of an electron acceptor group and an electron donor group connected by a rigid connecting group contg. delocalized .pi.-electrons; Y are configured in a regular syndioregic orientation with respect to dipole moments along the backbone. The polymers are useful for second-order nonlinear properties, and piezoelec. and pyroelec. properties. Thus, fluorinated diol HO(CH2)2(CF2)5CF(CF3)(CH2)2OH and diester EtO2CC(CN):CH-p-C6H4NEt(CH2)3NEt-p-C6H4CH:C(CN)CO2Et contg. 1 drop Bu2Sn dilaurate were heated to 165.degree. under N purge, then in vacuo, cooled and worked up to give polymer with mol. wt. 20,000.

IT **141823-63-4P**
RL: PREP (Preparation)
(accordion-like, prepn. of, for nonlinear properties)
RN 141823-63-4 CAPLUS
CN Poly[(hexadecylimino)-1,2-ethanediyl(hexadecylimino)-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)imino(2-hydroxy-1,3-propanediyl)imino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

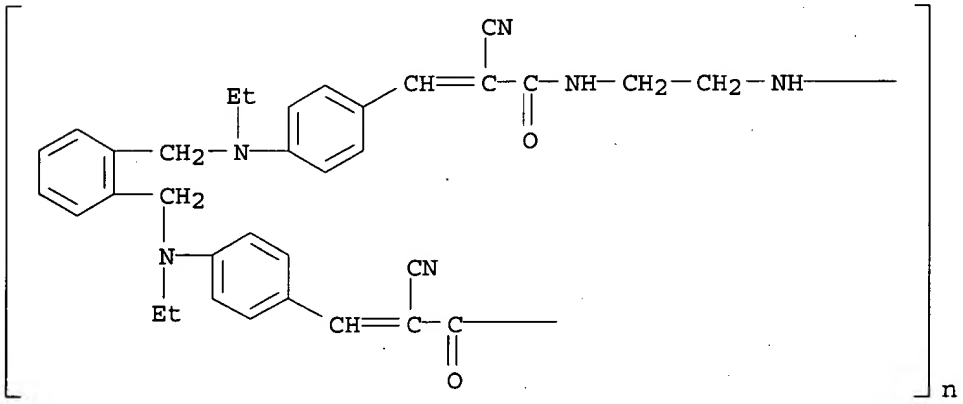
PAGE 1-A

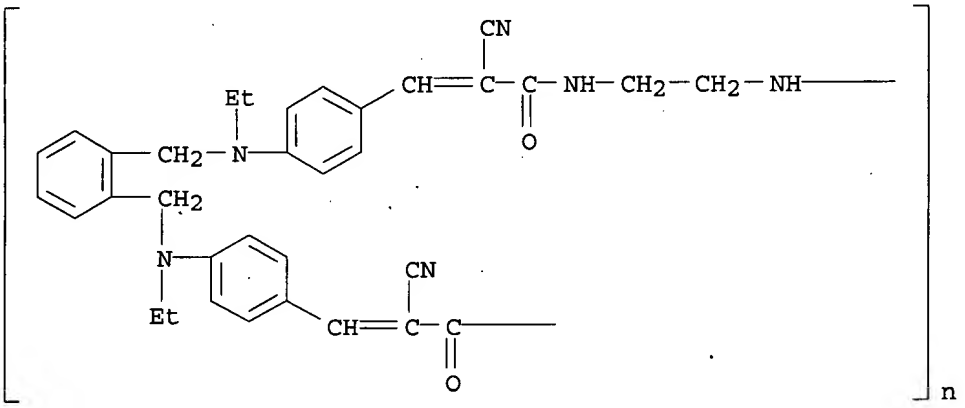


PAGE 1-B



IT **153033-18-2P**
RL: PREP (Preparation)
(prepn. of, accordion-like, for nonlinear properties)
RN 153033-18-2 CAPLUS
CN Poly[imino-1,2-ethanediylimino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene(ethylimino)methylene-1,2-phenylenemethylene(ethylimino)-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)] (9CI) (CA INDEX NAME)

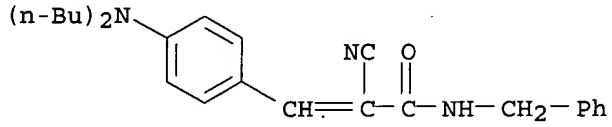




L4 ANSWER 29 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:473615 CAPLUS
DOCUMENT NUMBER: 119:73615
TITLE: Diffusion of dyes in polycarbonate. A new measurement technique and correlation with shadow areas
AUTHOR(S): Byers, Gary W.
CORPORATE SOURCE: Imaging Res. Lab., Eastman Kodak Co., Rochester, NY, 14650-02124, USA
SOURCE: Macromolecules (1993), 26(16), 4242-8
CODEN: MAMOBX; ISSN: 0024-9297
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Using a simple but novel technique, the diffusion of an assortment of dyes in bisphenol A polycarbonate (I) was examd. at temps. above the I glass temp. (180.0.degree.). The procedure yielded precise diffusion consts. at dye concns. approximating infinite diln. Initial attempts to obtain a quant. structure activity relation (QSAR) between the measured diffusion consts. and properties calcd. for MOPAC optimized dye structures were unsuccessful. However, elongating or streamlining the structures yielded a remarkably good QSAR with a signal parameter, the log of the shadow area cast down the dyes long axis.

IT **141458-71-1**
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(diffusion of, in bisphenol A polycarbonate, above polymer glass temp., measurement technique for)
RN 141458-71-1 CAPLUS
CN 2-Propenamide, 2-cyano-3-[4-(dibutylamino)phenyl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 30 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1992:428945 CAPLUS
DOCUMENT NUMBER: 117:28945
TITLE: Aqueous inks containing polyoxyalkylene derivatives of

dyes
INVENTOR(S): Kluger, Edward W.; Moore, Patrick D.; Wagner, Judy A.
PATENT ASSIGNEE(S): Milliken Research Corp., USA
SOURCE: U.S., 13 pp. Cont.-in-part of U.S. Ser. No. 139,683, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5043013	A	19910827	US 1989-394346	19890815

PRIORITY APPLN. INFO.: US 1987-139683 19871230

AB Marking-pen inks with low transfer substrates and good washability from hands and fabrics contain the title dyes. Thus, heating 70% H2SO4 42, polyethoxylated PhNH2 polyacetate (d.p. 27) 573, urea 7.6, and o-OHCC6H4SO3Na 52 g for 3 h at 95-100.degree., oxidn. with Bz2O2 at 95-110.degree., and neutralization gave a blue polyethoxylated triphenylmethane dye which was used in an ink with good washability from cotton fabrics and hands.

IT **137446-38-9P**
RL: PREP (Preparation)
(prepn. of, as dye for washable marker inks)

RN 137446-38-9 CAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[[4-[2-cyano-3-[(2-hydroxyethyl)amino]-3-oxo-1-propenyl]phenyl]imino]di-2,1-ethanediyl]bis[.omega.-hydroxy- (9CI) (CA INDEX NAME)

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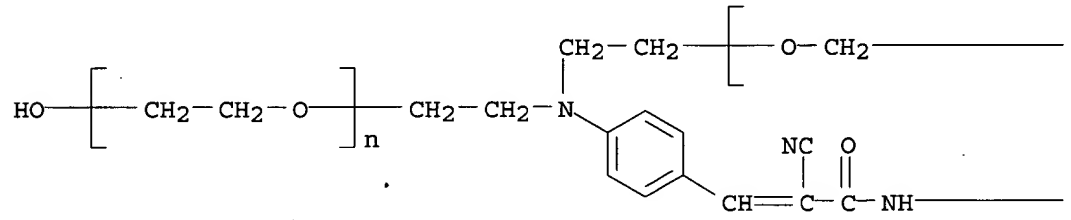

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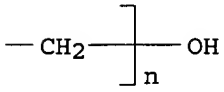

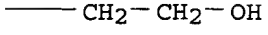

L4 ANSWER 31 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1992:427639 CAPLUS
DOCUMENT NUMBER: 117:27639
TITLE: New syndioregic mainchain, nonlinear optical polymers

and their ellipsometric characterization

AUTHOR(S): Lindsay, G. A.; Nee, S. F.; Hoover, J. M.; Stenger-Smith, J. D.; Henry, R. A.; Kubin, R. F.; Seltzer, M. D.

CORPORATE SOURCE: Res. Dep., Nav. Weapons Cent., China Lake, CA, 93555, USA

SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (1991), 1560(Nonlinear Opt. Prop. Org. Mater. 4), 443-53
CODEN: PSISDG; ISSN: 0277-786X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB New chromophoric polymers with syndioregic main chains which assume folded, polar conformations of the backbone are prepd. Characterization of multilayer Langmuir-Blodgett films by null ellipsometry to det. the anisotropic refractive parameters was performed at different angles of incidence using a wavelength of 1.0 .mu.m.

IT **141823-62-3**
RL: PRP (Properties)
(glass temp. of)

RN 141823-62-3 CAPLUS

CN Poly[(ethylimino)-1,6-hexanediyl(ethylimino)-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)imino-1,6-hexanediylimino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

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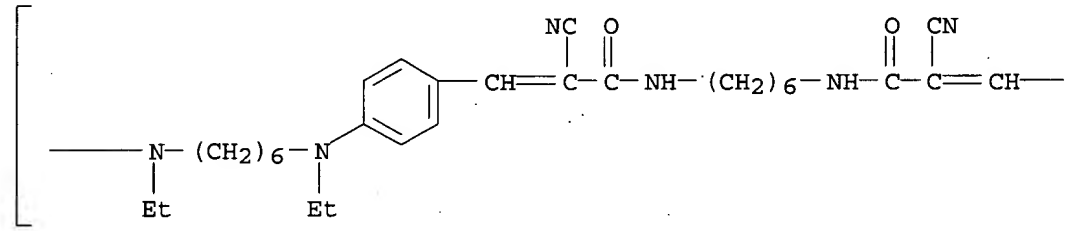

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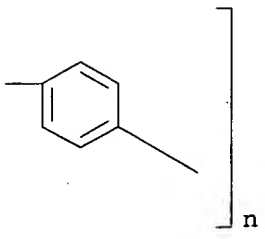
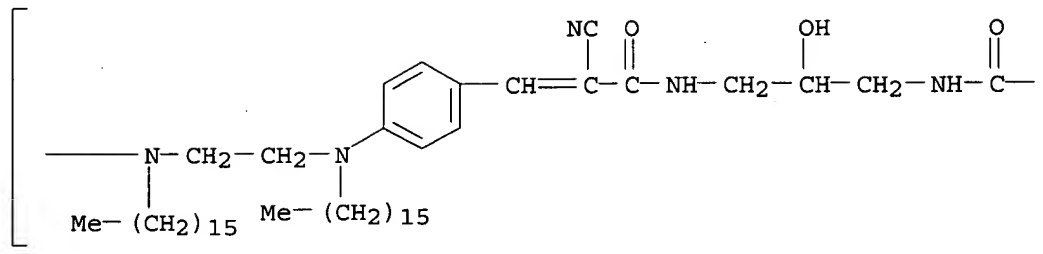


IT **141823-63-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and characterization of optical nonlinear)

RN 141823-63-4 CAPLUS

CN Poly[(hexadecylimino)-1,2-ethanediyl(hexadecylimino)-1,4-phenylene(2-cyano-3-oxo-1-propene-1,3-diyl)imino(2-hydroxy-1,3-propanediyl)imino(2-cyano-1-oxo-2-propene-1,3-diyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



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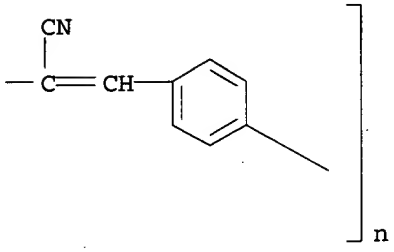
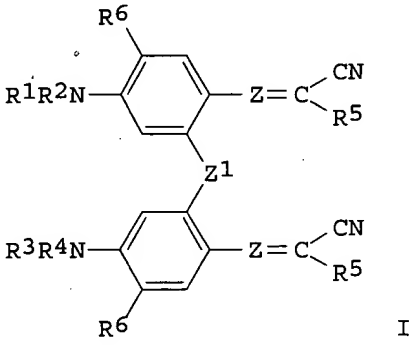


L4 ANSWER 32 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1992:265742 CAPLUS
DOCUMENT NUMBER: 116:265742
TITLE: Thermal-transfer recording biscyanostyrene dye
INVENTOR(S): Chiba, Junji; Ito, Asao
PATENT ASSIGNEE(S): Sankio Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03295687	A2	19911226	JP 1990-97704	19900416

PRIORITY APPLN. INFO.: JP 1990-97704 19900416
OTHER SOURCE(S): MARPAT 116:265742
GI



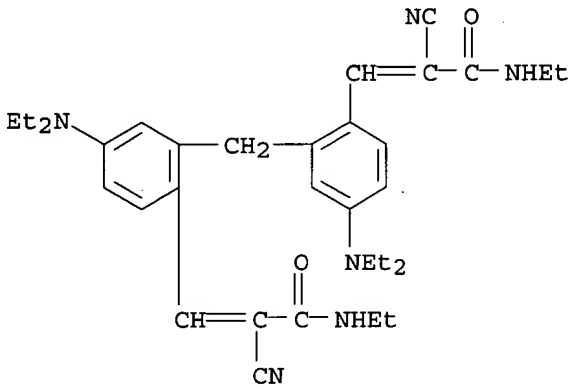
I

AB The dye consists of I [R1, R3 = H, (substituted) alkyl, cycloalkyl, aralkyl, aryl, atom or at. group forming 5- or 6-membered ring with R6; R2, R4 = H, (substituted) alkyl, cycloalkyl, aralkyl, aryl; R1R2, R3R4 may form (O-, N-, or S-contg.) 5- or 6-membered ring; R5 = electron-attracting group; R6 = H, atom or at. group forming 5- or 6-membered ring with R1 and R3; Z = methine, N; Z1 = divalent linking group]. The dye gave good yellow images.

IT **141592-39-4 141592-41-8**
RL: USES (Uses)
(thermal-transfer recording medium dye, for yellow images)

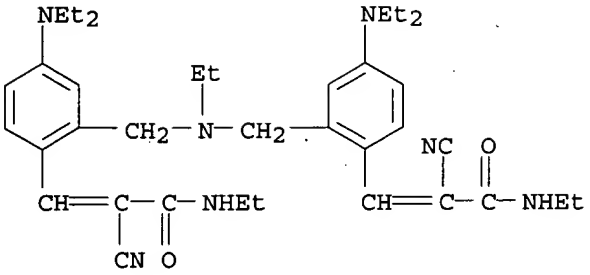
RN 141592-39-4 CAPLUS

CN 2-Propenamide, 3,3'-[methylenebis[4-(diethylamino)-2,1-phenylene]]bis[2-cyano-N-ethyl- (9CI) (CA INDEX NAME)



RN 141592-41-8 CAPLUS

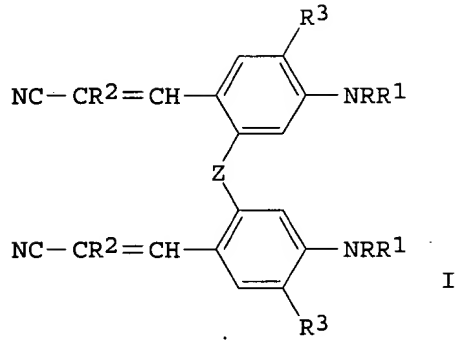
CN 2-Propenamide, 3,3'-[(ethylimino)bis[methylene[4-(diethylamino)-2,1-phenylene]]]bis[2-cyano-N-ethyl- (9CI) (CA INDEX NAME)



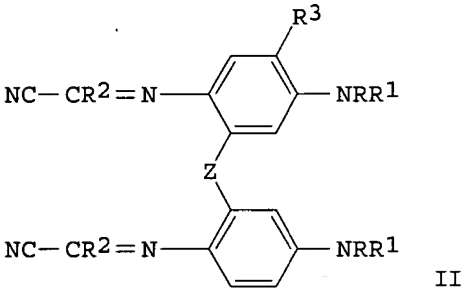
L4 ANSWER 33 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1992:265728 CAPLUS
DOCUMENT NUMBER: 116:265728
TITLE: Thermal-transfer sheets using bisaniline type dye
INVENTOR(S): Sugafuji, Junpei; Kafuku, Masaaki; Nakamura, Masayuki
PATENT ASSIGNEE(S): Dainippon Printing Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03297691	A2	19911227	JP 1990-99936	19900416
JP 2857466	B2	19990217		

PRIORITY APPLN. INFO.: JP 1990-99936 19900416
OTHER SOURCE(S): MARPAT 116:265728
GI



I



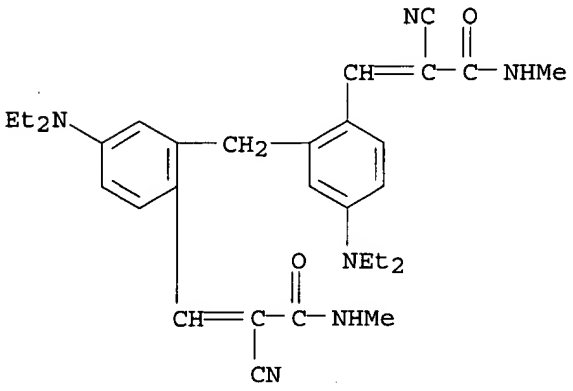
II

AB The thermal-transfer sheets are prepd. by forming, on 1 side of a sheet substrate, a layer contg. a dye I or II [R, R1 = H, (substituted) alkyl, cycloalkyl, aralkyl, aryl, R and R1 may form a 5- or 6-membered ring which may contain O, N or S atom; R2 = electron-attractive group; R3 = H, atom(s) required to form a 5- or 6-membered ring together with R; Z = divalent group]. A thermal-transfer sheet using I (R = R1 = Et, R2 = CN, R3 = H, Z = CH2) showed good thermal sensitivity and gave high d. yellow images with good storage stability.

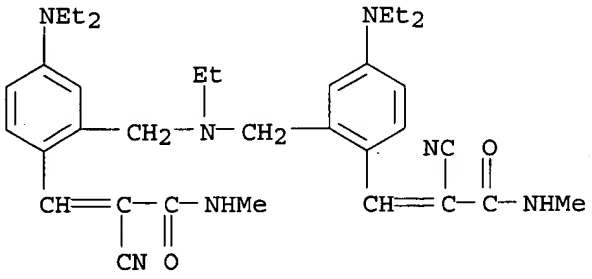
IT **141472-28-8 141472-36-8**
RL: USES (Uses)
(dye, thermal-transfer recording material using)

RN 141472-28-8 CAPLUS

CN 2-Propenamide, 3,3'-[methylenebis[4-(diethylamino)-2,1-phenylene]]bis[2-cyano-N-methyl- (9CI) (CA INDEX NAME)



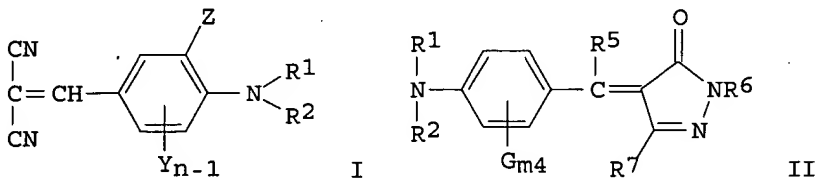
RN 141472-36-8 CAPLUS
CN 2-Propenamide, 3,3'-[(ethylimino)bis[methylene[4-(diethylamino)-2,1-phenylene]]]bis[2-cyano-N-methyl- (9CI) (CA INDEX NAME)



L4 ANSWER 34 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1992:245326 CAPLUS
DOCUMENT NUMBER: 116:245326
TITLE: Yellow dye mixture for thermal color proofing
INVENTOR(S): Evans, Steven; Chapman, Derek D.
PATENT ASSIGNEE(S): Eastman Kodak Co., USA
SOURCE: U.S., 14 pp. Cont.-in-part of U.S. Ser. No. 606,399, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5081101	A	19920114	US 1991-676922	19910328
CA 2052843	AA	19920501	CA 1991-2052843	19911004
EP 483801	A1	19920506	EP 1991-118517	19911030
EP 483801	B1	19940112		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 04265792	A2	19920921	JP 1991-285091	19911030
JP 05054833	B4	19930813		

PRIORITY APPLN. INFO.: US 1990-606399 19901031
US 1991-676922 19910328
OTHER SOURCE(S): MARPAT 116:245326
GI

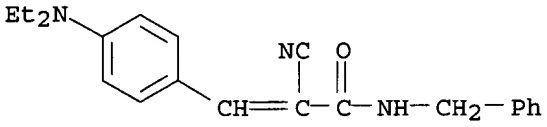


AB A yellow dye-donor element for thermal dye transfer comprises on a support a dye layer contg. a mixt. of .gtoreq.1 I (R1 = C1-10-alkyl,

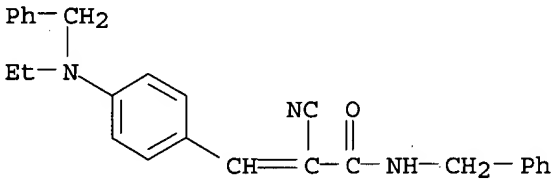
C5-6-cycloalkyl, allyl; R2 = R1, or R2Z = 5- or 6-membered ring; Z = H, R1, alkoxy, halo, aryloxy; Y = R1, C1-10-alkoxy, halo, atoms to form a 5- or 6-membered fused ring system; n = 1-3) and .gtoreq.1 II (R6 = R1, C6-10-aryl; R7 = C1-10-alkoxy, C6-10-aryloxy, NHR8, NR8R9, or a fused ring with benzene; NR3R4 = 5- or 6-membered heterocyclyl, either or both of R3,4 forming a fused ring with benzene; R5 = H, R1, carbamoyl, alkoxycarbonyl; R8,9 = R6; NR8R9 = 5- or 6-membered heterocyclyl; m = 1-3; G = alkyl, alkoxy, halo, aryloxy, fused ring with benzene) dispersed in a polymeric binder. A process of forming a dye transfer image is also claimed.

IT **141458-68-6 141458-69-7 141458-70-0 141458-71-1**
RL: USES (Uses)
(dye, for thermal-transfer color proof)

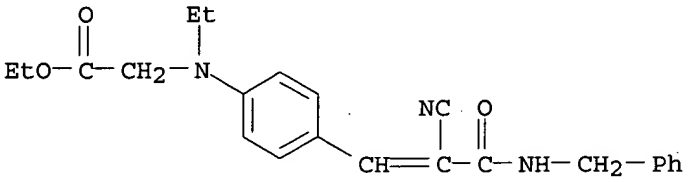
RN 141458-68-6 CAPLUS
CN 2-Propenamide, 2-cyano-3-[4-(diethylamino)phenyl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



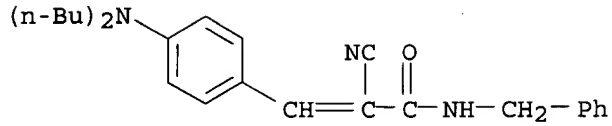
RN 141458-69-7 CAPLUS
CN 2-Propenamide, 2-cyano-3-[4-[ethyl(phenylmethyl)amino]phenyl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 141458-70-0 CAPLUS
CN Glycine, N-[4-[2-cyano-3-oxo-3-[(phenylmethyl)amino]-1-propenyl]phenyl]-N-ethyl-, ethyl ester (9CI) (CA INDEX NAME)



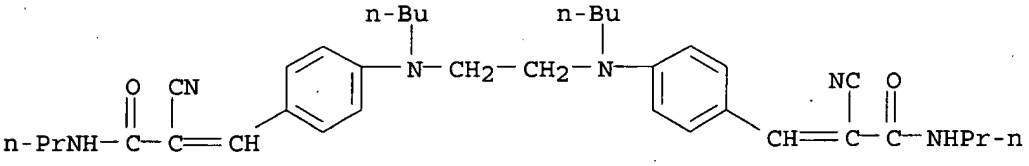
RN 141458-71-1 CAPLUS
CN 2-Propenamide, 2-cyano-3-[4-(dibutylamino)phenyl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 35 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1991:682120 CAPLUS
DOCUMENT NUMBER: 115:282120
TITLE: Yellow colorants for sublimation thermal-transfer printing
INVENTOR(S): Chiba, Junji; Kato, Hiroyuki
PATENT ASSIGNEE(S): Sankyo Kagaku K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

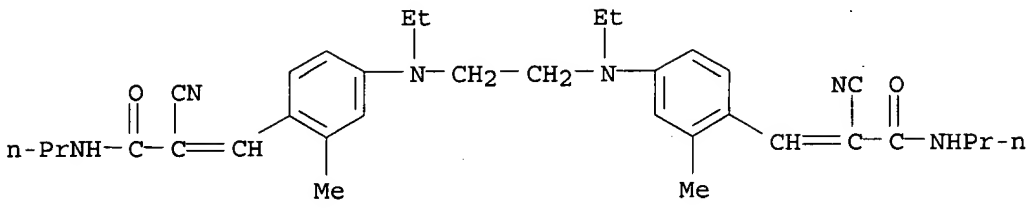
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02292371	A2	19901203	JP 1989-112005	19890502

PRIORITY APPLN. INFO.: JP 1989-112005 19890502
GI For diagram(s), see printed CA Issue.
AB The title colorants I [R1-2 = H, (un)substituted alkyl, cycloalkyl, aralkyl, aryl; R1-2 may be bonded with X to form 5- or 6-membered ring; R3-4 = H, halo, cyano, (un)substituted alkyl, cycloalkyl, alkoxy, aryl, aralkyl, acylamino, sulfonylamino, ureido, carbamoyl, sulfamoyl, acyl, amino; A1-2 = electron-withdrawing group; one of A1-2 may be aryl; Z = CH, N; Y = divalent group; X = H or group to from 5- or 6-membered ring with R1-2; m, n = 1, 2] are prepd. Thus, condensation of PhNHBu and Br(CH2)5Br in presence of Na2CO3 and Vilsmeier formylation of the product gave N,N'-di-n-butyl-N,N'-bis(4-formylphenyl)-1,5-diaminopentane, which was then treated with CH2(CN)2 to give 80% N,N'-di-n-butyl-N,N'-bis[4-(2,2-dicyanoethylene)phenyl]-1,5-diaminopentane (II). An ink contg. II 4, ethyl Cellosolve 8, MEK 44, and PhMe 44 parts was applied on a capacitor tissue paper and dried to obtain a thermal-transfer material, which gave high-d. image with bright yellow color.
IT **134200-21-8P 136029-44-2P**
RL: PREP (Preparation)
(prepn. of, yellow dye, for sublimation thermal-transfer printing)
RN 134200-21-8 CAPLUS
CN 2-Propenamide, 3,3'-[1,2-ethanediylbis[(butylimino)-4,1-phenylene]]bis[2-cyano-N-propyl- (9CI) (CA INDEX NAME)



RN 136029-44-2 CAPLUS
CN 2-Propenamide, 3,3'-[1,2-ethanediylbis[(ethylimino)(2-methyl-4,1-

phenylene)]]bis[2-cyano-N-propyl- (9CI) (CA INDEX NAME)

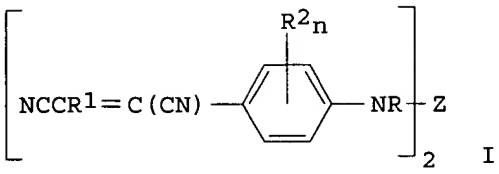


L4 ANSWER 36 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1991:618967 CAPLUS
DOCUMENT NUMBER: 115:218967
TITLE: Thermal transfer sheet using biscyanostyrene dye
INVENTOR(S): Sugafuji, Junpei; Nakamura, Masayuki
PATENT ASSIGNEE(S): Dainippon Printing Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03086592	A2	19910411	JP 1989-223277	19890831
JP 2844708	B2	19990106		
WO 9013435	A1	19901115	WO 1990-JP562	19900427
W: US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
EP 427867	A1	19910522	EP 1990-907389	19900427
EP 427867	B1	19940921		
R: DE, FR, GB				
EP 582324	A1	19940209	EP 1993-117101	19900427
EP 582324	B1	19961023		
R: DE, FR, GB				
EP 727323	A1	19960821	EP 1996-105721	19900427
EP 727323	B1	19980819		
R: DE, FR, GB				
EP 847870	A1	19980617	EP 1998-101916	19900427
EP 847870	B1	20000105		
R: DE, FR, GB				
US 5223476	A	19930629	US 1990-623442	19901218
US 5304528	A	19940419	US 1993-22413	19930217

PRIORITY APPLN. INFO.:
JP 1989-111969 19890502
JP 1989-190868 19890724
JP 1989-223277 19890831
EP 1993-117101 19900427
EP 1996-105721 19900427
WO 1990-JP562 19900427
US 1990-623442 19901214

GI



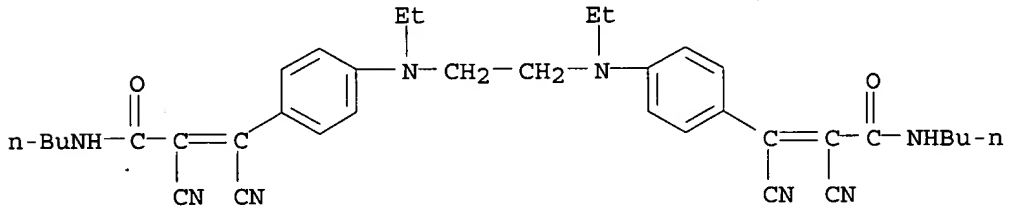
I

AB The title sheet comprises a substrate with a coating of a dye-carrying layer contg. a dye I [R = H, (substituted) alkyl, cycloalkyl, aralkyl, aryl, R may form a 5- or 6-membered ring together with R2; R1 = electron-attracting group; R2 = H, halo, (substituted) alkyl, cycloalkyl, alkoxy, aralkyl, acylamino, sulfonylamino, ureido, carbamoyl, sulfamoyl, acyl, amino; Z = divalent group; n = 1,2]. A thermal-transfer sheet using I (R = C2H4CN, R1 = CN, R2 = H, Z = C3H6, n = 1) gave clear, high d. images with fastness and good storage stability.

IT **136821-94-8 136987-88-7**
RL: USES (Uses)
(thermal-transfer recording material using)

RN 136821-94-8 CAPLUS

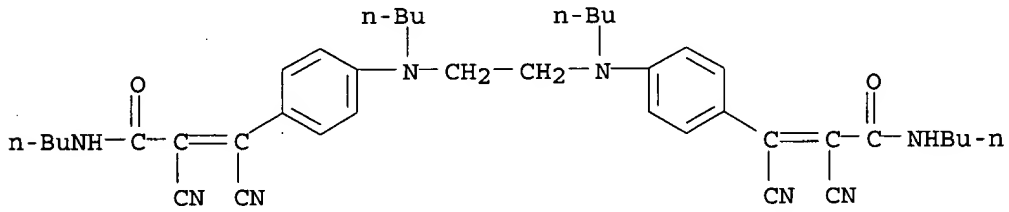
CN 2-Propenamide, 3,3'-[1,2-ethanediylbis[(ethylimino)(methyl-4,1-phenylene)]]bis[N-butyl-2,3-dicyano- (9CI) (CA INDEX NAME)



2 (D1—Me)

RN 136987-88-7 CAPLUS

CN 2-Propenamide, 3,3'-[1,2-ethanediylbis[(butylimino)-4,1-phenylene]]bis[N-butyl-2,3-dicyano- (9CI) (CA INDEX NAME)



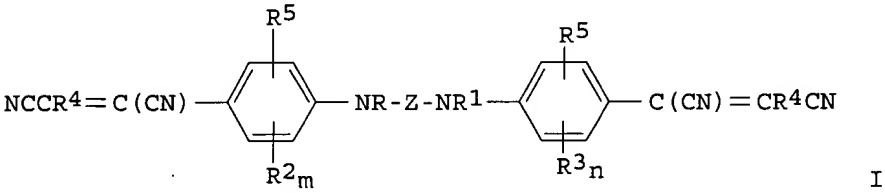
L4 ANSWER 37 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1991:618966 CAPLUS
DOCUMENT NUMBER: 115:218966
TITLE: Biscyanostyrene dyes for thermal-transfer recording

09772617

INVENTOR(S): Chiba, Junji; Kato, Hiroyuki
PATENT ASSIGNEE(S): Sankyo Chemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03086591	A2	19910411	JP 1989-223015	19890831

PRIORITY APPLN. INFO.: JP 1989-223015 19890831
GI

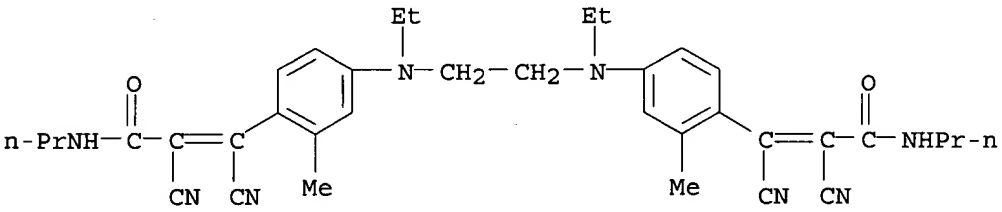


I

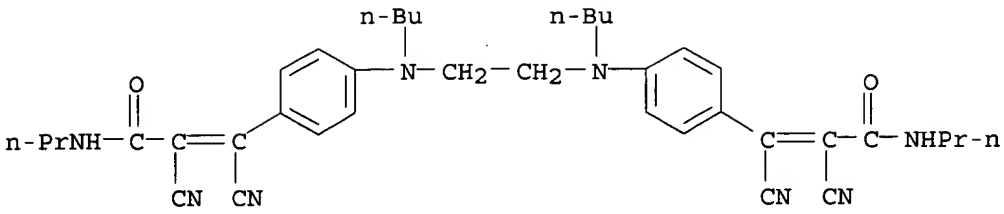
AB A dye for thermal-transfer recording has formula I [R, R1 = H, (substituted) alkyl, cycloalkyl, aralkyl, aryl, they may form a 5- or 6-membered ring together with R5, resp.; R2, R3 = H, halo, CN, (substituted) alkyl, cycloalkyl, alkoxy, aryl, aralkyl, acylamino, sulfonylamino, ureido, carbamoyl, sulfamoyl, acyl, amino; R4 = electron-attracting group; R5 = H, atom(s) required to form a 5-or 6-membered ring together with R or R1 ; Z = divalent group; m, n = 1,2]. A thermal-transfer sheet using I (R = R1 = Bu, R2 = R3 = R5 = H, R4 = CN, Z = (CH2)5] gave clear, high d. magenta images.

IT **136967-47-0 136987-93-4**
RL: USES (Uses)
(thermal-transfer recording material using)

RN 136967-47-0 CAPLUS
CN 2-Propenamide, 3,3'-[1,2-ethanediylbis[(ethylimino)(2-methyl-4,1-phenylene)]]bis[2,3-dicyano-N-propyl- (9CI) (CA INDEX NAME)



RN 136987-93-4 CAPLUS
CN 2-Propenamide, 3,3'-[1,2-ethanediylbis[(butylimino)-4,1-phenylene]]bis[2,3-dicyano-N-propyl- (9CI) (CA INDEX NAME)



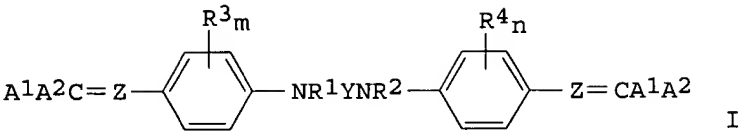
L4 ANSWER 38 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1991:249362 CAPLUS
DOCUMENT NUMBER: 114:249362
TITLE: Thermal-transfer dye sheet
INVENTOR(S): Sugafuji, Junpei; Saito, Hitoshi; Eguchi, Hiroshi
PATENT ASSIGNEE(S): Dainippon Printing Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02292090	A2	19901203	JP 1989-111969	19890502
JP 2844345	B2	19990106		
WO 9013435	A1	19901115	WO 1990-JP562	19900427
W: US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
EP 427867	A1	19910522	EP 1990-907389	19900427
EP 427867	B1	19940921		
R: DE, FR, GB				
EP 582324	A1	19940209	EP 1993-117101	19900427
EP 582324	B1	19961023		
R: DE, FR, GB				
EP 727323	A1	19960821	EP 1996-105721	19900427
EP 727323	B1	19980819		
R: DE, FR, GB				
EP 847870	A1	19980617	EP 1998-101916	19900427
EP 847870	B1	20000105		
R: DE, FR, GB				
US 5223476	A	19930629	US 1990-623442	19901218
US 5304528	A	19940419	US 1993-22413	19930217

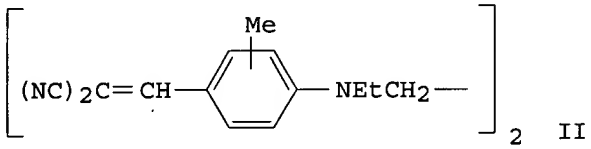
PRIORITY APPLN. INFO.:

JP 1989-111969	19890502
JP 1989-190868	19890724
JP 1989-223277	19890831
EP 1993-117101	19900427
EP 1996-105721	19900427
WO 1990-JP562	19900427
US 1990-623442	19901214

GI



I



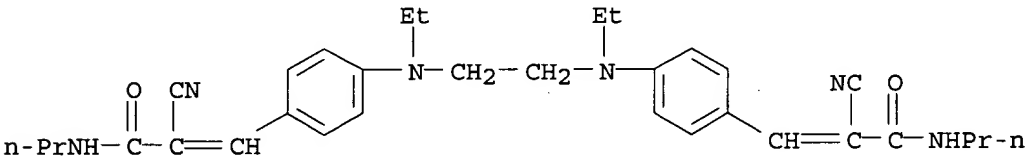
II

AB Dye layer of the title sheet contains dyes I [R1-2 = H, (cyclo)alkyl, aralkyl, aryl, groups that form 5-6 membered ring with R3-4; R3-4 = H, halo, cyano, (cyclo)alkyl, alkoxy, aryl, aralkyl, acylamino, sulfonylamino, ureido, carbamoyl, sulfamoyl, acyl, amino; A1-2 = electron-attracting group; 1 of A1-2 may be aryl; Z = methine, N; Y = divalent group; m, n = 1-3]. These dyes, despite their high mol. wt., show high transferability, durability and coloring property, and the image is well fixed. The images obtained have high resistance to discoloration in storage. Thus, a dye sheet having a layer contg. II and poly(vinyl butyral) was used for thermal-transfer printing on coated receptor sheet, to obtain high-d. image which was resistant to storage for 48 h at 70.degree..

IT **134120-63-1 134200-21-8**
RL: USES (Uses)
(dye, thermal-transfer dye sheets contg.)

RN 134120-63-1 CAPLUS

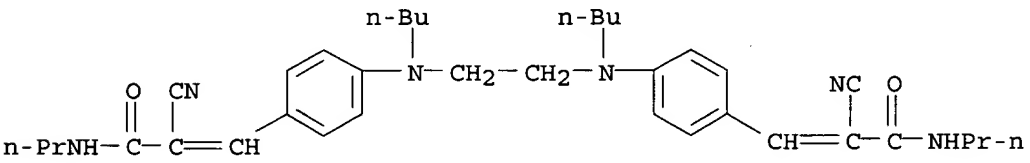
CN 2-Propenamide, 3,3'-[1,2-ethanediylbis[(ethylimino)(methyl-4,1-phenylene)]]bis[2-cyano-N-propyl- (9CI) (CA INDEX NAME)



2 (D1—Me)

RN 134200-21-8 CAPLUS

CN 2-Propenamide, 3,3'-[1,2-ethanediylbis[(butylimino)-4,1-phenylene]]bis[2-cyano-N-propyl- (9CI) (CA INDEX NAME)

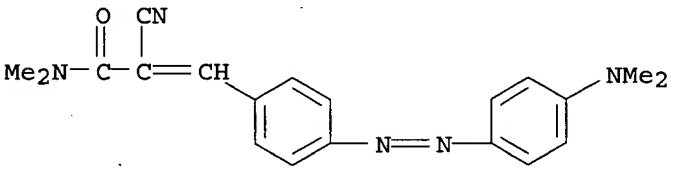


L4 ANSWER 39 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1990:613196 CAPLUS
DOCUMENT NUMBER: 113:213196
TITLE: Effects of molecular rigidity on electric field induced alignment and orientational stability of dipolar chromophore composites
AUTHOR(S): Katz, H. E.; Schilling, M. L.; Washington, G.; Dirk, C. W.; Holland, W. R.; Fang, T.; Singer, K. D.
CORPORATE SOURCE: AT and T Bell Lab., Murray Hill, NJ, 07974, USA
SOURCE: Materials Research Society Symposium Proceedings (1990), 173(Adv. Org. Solid State Mater.), 543-9
CODEN: MRSPDH; ISSN: 0272-9172
DOCUMENT TYPE: Journal
LANGUAGE: English

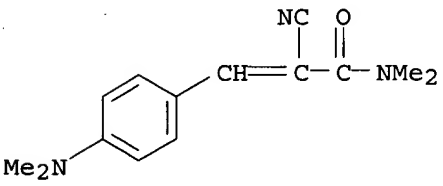
AB The relationship between the supramol. conformational structure of assembled chromophores and their susceptibility to elec. field poling is of interest for maximizing the bulk alignment achievable in an electro-optic material. Soln.-phase dielec. const. measurements were employed to investigate possible enhancements in dipolar susceptibility as a function of connectivity and state of aggregation in rationally synthesized chromophore assemblies, including conformationally defined head-to-tail oligomers. On the other hand, conformationally unrestricted, highly dipolar azo dyes behave as relatively isolated mols. even when present in supersatd. solns. and in close proximity to polymer chains.

IT **123643-40-3 125535-35-5**
RL: USES (Uses)
(elec. field-induced alignment and orientational stability of, alignment in polymeric electro-optical materials in relation to)

RN 123643-40-3 CAPLUS
CN 2-Propenamide, 2-cyano-3-[4-[[4-(dimethylamino)phenyl]azo]phenyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 125535-35-5 CAPLUS
CN 2-Propenamide, 2-cyano-3-[4-(dimethylamino)phenyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



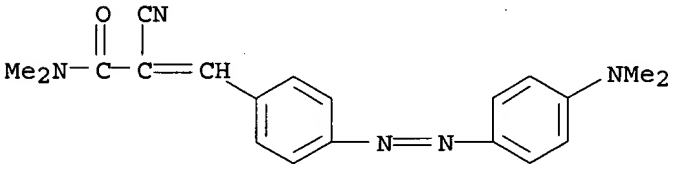
L4 ANSWER 40 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1990:498441 CAPLUS

DOCUMENT NUMBER: 113:98441
TITLE: Conformationally restricted polymers and oligomers for second order nonlinear optics: dielectric and solid state characterization
AUTHOR(S): Katz, H. E.; Schilling, M. L.
CORPORATE SOURCE: AT and T Bell Lab., Murray Hill, NJ, 07974, USA
SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (1990), Volume Date 1989, 1147(Nonlinear Opt. Prop. Org. Mater. 2), 90-100
CODEN: PSISDG; ISSN: 0277-786X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The concn.-dependent dielec. consts. of solns. of 4-amino-4'-(2,2-dicyanovinyl)azobenzene dyes and a copolymer of dye deriv. with Me methacrylate measured at concns. comparable to those in nonlinear optical polymer films suggested that chromophore aggregation did not occur in this concn. range and, therefore, should not diminish poling-induced order in the copolymer. The dipole moments of head-to-tail-linked nonlinear optical cyanovinyl chromophores with reinforced dipole moment additivity were consistent with predicted values. The dipole moments of solns. of anilines and azo dyes contg. cyanovinylcarboxamide linkages and 4-nitroaniline derivs. were measured.

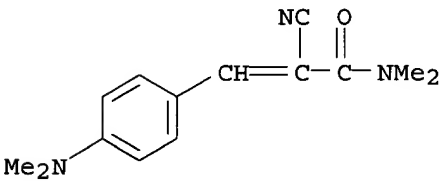
IT **123643-40-3**
RL: PRP (Properties)
(dipole moment of chloroform solns. of, second-order optical nonlinear property in relation to)

RN 123643-40-3 CAPLUS
CN 2-Propenamide, 2-cyano-3-[4-[[4-(dimethylamino)phenyl]azo]phenyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



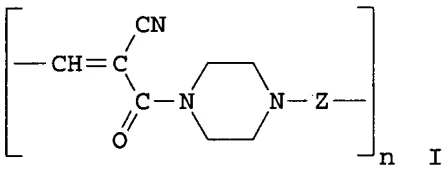
IT **125535-35-5**
RL: PRP (Properties)
(dipole moment of dioxane solns. of, second-order optical nonlinear property in relation to)

RN 125535-35-5 CAPLUS
CN 2-Propenamide, 2-cyano-3-[4-(dimethylamino)phenyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



L4 ANSWER 41 OF 57 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1990:99358 CAPLUS
DOCUMENT NUMBER: 112:99358
TITLE: Preparation and dielectric properties of dipolar polymers for nonlinear optical (NLO) applications
AUTHOR(S): Schilling, M. L.; Katz, H. E.
CORPORATE SOURCE: AT and T Bell Lab., Murray Hill, NJ, 07974, USA
SOURCE: Polymeric Materials Science and Engineering (1989), 61, 936-9
CODEN: PMSEDG; ISSN: 0743-0515
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

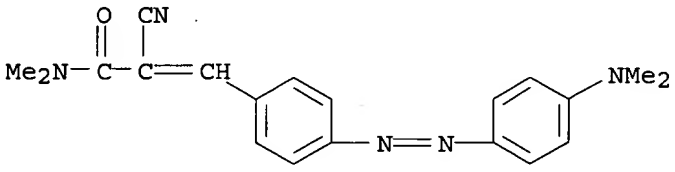


I

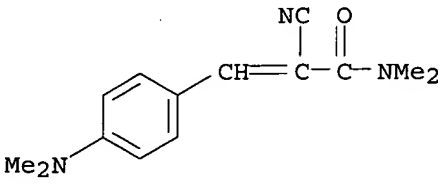
AB Head-to-tail dipolar oligomers, (I, Z = p-phenylene or p-phenylene-azo-p-phenylene) were prepd., and the dipole moments were consistent with those predicted from conformational anal., x-ray structures, and dielec. properties of model compds.

IT **123643-40-3 125535-35-5**
RL: PRP (Properties)
(dielec. properties of, as model compd. for dipolar oligomeric polyamides for nonlinear optical applications)

RN 123643-40-3 CAPLUS
CN 2-Propenamide, 2-cyano-3-[4-[[4-(dimethylamino)phenyl]azo]phenyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 125535-35-5 CAPLUS
CN 2-Propenamide, 2-cyano-3-[4-(dimethylamino)phenyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

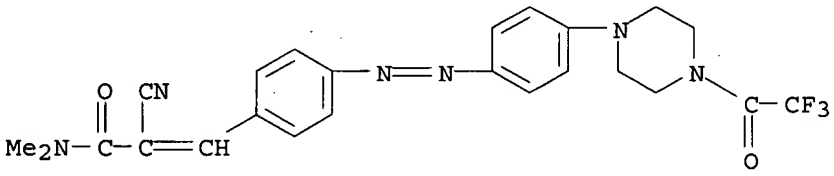


L4 ANSWER 42 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1989:615957 CAPLUS
DOCUMENT NUMBER: 111:215957
TITLE: Synthetic approaches to head-to-tail linked azo dyes for nonlinear optical applications
AUTHOR(S): Schilling, M. L.; Katz, H. E.
CORPORATE SOURCE: AT and T Bell Lab., Murray Hill, NJ, 07974, USA
SOURCE: Chemistry of Materials (1989), 1(6), 668-73
CODEN: CMATEX; ISSN: 0897-4756
DOCUMENT TYPE: Journal
LANGUAGE: English

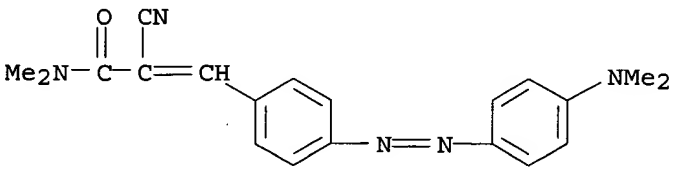
AB Two pathways for the synthesis of dipolar, main-chain azo dye oligomers were investigated. The first involved amide coupling of an N-arylpiperazine with a cyanocinnamic acid-terminated azo dye, while the second depended upon Knoevenagel condensations of piperazinamides of cyanoacetic acid with (arylazo)benzaldehydes. The amide coupling was successful in the case of N-phenylpiperazine but failed with ((arylazo)phenyl)piperazines. The Knoevenagel condensation was more general, and made possible the synthesis of a dimeric azo dye and an oligomeric azo dye mixt. with the desired connectivity. The principal mol. moments of the chromophores in these oligomers, when in extended conformations, were significantly additive so that poled polymeric materials contg. these oligomers could be expected to exhibit larger hyperpolarizabilities than would materials contg. analogous, monomeric chromophores. Dipole moment measurements on the dimer and on models of its two "halves" confirmed this additivity.

IT **123643-38-9P 123643-40-3P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and spectra of)

RN 123643-38-9 CAPLUS
CN 2-Propenamide, 2-cyano-N,N-dimethyl-3-[4-[[4-[4-(trifluoroacetyl)-1-piperazinyl]phenyl]azo]phenyl]- (9CI) (CA INDEX NAME)

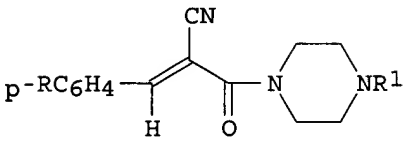


RN 123643-40-3 CAPLUS
CN 2-Propenamide, 2-cyano-3-[4-[[4-(dimethylamino)phenyl]azo]phenyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



L4 ANSWER 43 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1989:553750 CAPLUS

DOCUMENT NUMBER: 111:153750
TITLE: Head-to-tail assemblies of dipolar, piperazine-linked chromophores: synthesis, x-ray structure, and dielectric characterization
AUTHOR(S): Katz, H. E.; Schilling, M. L.
CORPORATE SOURCE: AT and T Bell Lab., Murray Hill, NJ, 07974, USA
SOURCE: Journal of the American Chemical Society (1989), 111(19), 7554-7
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 111:153750
GI



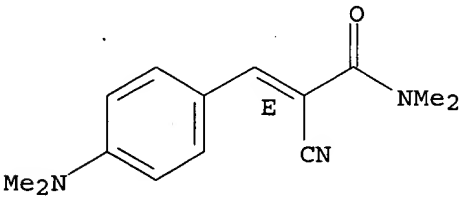
I

AB Dimer I (R = Et2N, R1 = C6H4NO2-p) (II) and a mixt. of oligomers of acceptor-substituted anilines are prepd. either by Knoevenagel condensation of substituted (cyanoacetyl)piperazines with p-aminobenzaldehydes or by carbonyldiimidazole-promoted coupling of phenylpiperazines with p-amino-.alpha.-cyanocinnamic acids. The resulting oligomeric acylpiperazines possess significantly additive mol. moments when in extended conformations. II is conformationally defined. X-ray structural anal. of model compd. I (R = Me2N, R1 = Ph) confirmed the conformation and bond angles at the amide linkage. The enforced extended conformation of the dimer results in an enhanced dipole moment relative to the constituent monomers and raises the possibility of further enhancements in extended higher oligomers. Acylation of 4-(4-nitrophenyl)piperazine with ClCH2COCl leads to HCN evolution during workup and presents a safety problem.

IT **122648-75-3P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and dipole moment of)

RN 122648-75-3 CAPLUS
CN 2-Propenamide, 2-cyano-3-[4-(dimethylamino)phenyl]-N,N-dimethyl-, (E)-(9CI) (CA INDEX NAME)

Double bond geometry as shown.



L4 ANSWER 44 OF 57 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1989:130521 CAPLUS
DOCUMENT NUMBER: 110:130521
TITLE: Herbicidally active enols
INVENTOR(S): Ashmore, John W.
PATENT ASSIGNEE(S): Rohm and Haas Co., USA
SOURCE: U.S., 23 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

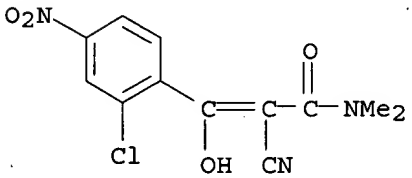
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4781750	A	19881101	US 1985-770033	19850827
EP 213892	A2	19870311	EP 1986-306472	19860821
EP 213892	A3	19890118		
EP 213892	B1	19920325		

R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE
PRIORITY APPLN. INFO.: US 1985-770033 19850827
OTHER SOURCE(S): CASREACT 110:130521; MARPAT 110:130521

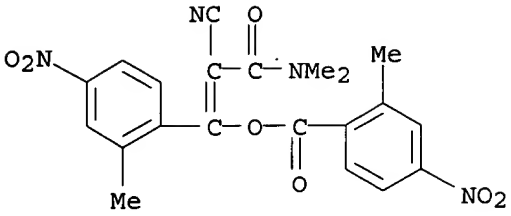
AB The enols ABC:CW(OV) [A = COR18 CO2R1, CONR4R5; B = CN, COR, CO2R, SOnR2; V = H, alkyl, COR3, phenylalkyl; W = (un)substituted furan, thiophene or Ph; R, R1 = alkyl; R2 = (un)substituted alkyl, cycloalkyl or Ph; R3 = (un)substituted Ph; R4, R5 = alkyl; NR4R5 = heterocyclyl; n = 0, 1, 2] are prepd. as herbicides. 2-Nitro-4-chlorobenzoyl chloride (prepn. given) was added to a cooled soln. of N,N-dimethylcyanoacetamide, Et3N and 4-dimethylaminopyridine in THF, to give N,N-dimethyl-2-(2-nitro-4-chlorobenzoyl)-2-cyanoacetamide (I). Pre-emergence application of 8 lb I/ha controlled the monocotyledonous weeds by 80% and the dicotyledonous weeds by 72%.

IT **110964-30-2P 119164-26-0P**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as herbicide)

RN 110964-30-2 CAPLUS
CN 2-Propenamide, 3-(2-chloro-4-nitrophenyl)-2-cyano-3-hydroxy-N,N-dimethyl-(9CI) (CA INDEX NAME)



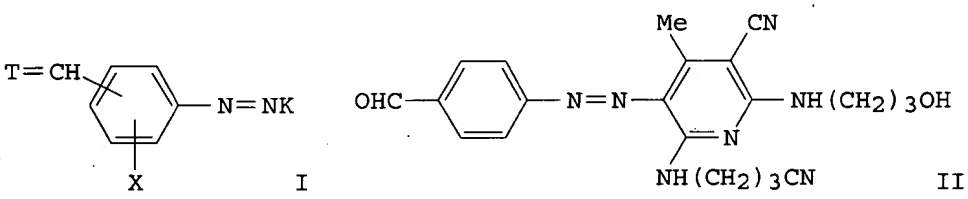
RN 119164-26-0 CAPLUS
CN Benzoic acid, 2-methyl-4-nitro-, 2-cyano-3-(dimethylamino)-1-(2-methyl-4-nitrophenyl)-3-oxo-1-propenyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 45 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1988:408018 CAPLUS
DOCUMENT NUMBER: 109:8018
TITLE: Manufacture of [(formylphenyl)azo]pyridine and (styrylazo)pyridine dyes for polyester fibers
INVENTOR(S): Loeffler, Hermann
PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.
SOURCE: Ger. Offen., 12 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3619605	A1	19871217	DE 1986-3619605	19860611

PRIORITY APPLN. INFO.: DE 1986-3619605 19860611
GI

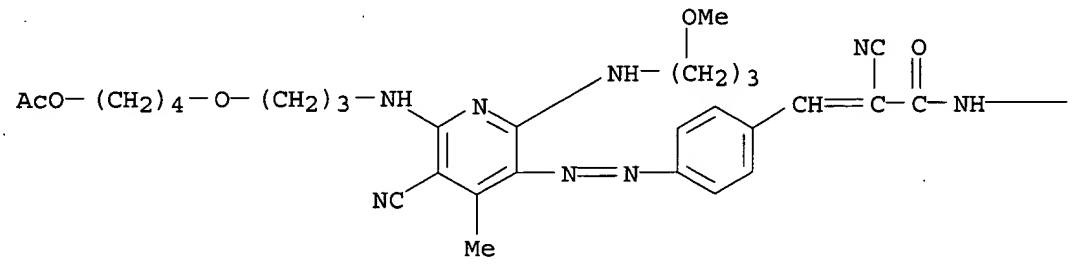


AB The title dyes I (K = coupling component residue of 2,6-diaminopyridine or 2-hydroxy-6-pyridone series; T = O, active methylene compd. residue; X = H, halogen), useful for dyeing synthetic polyester fibers, are prepd. Thus, 4-H2NC6H4CHO was diazotized and coupled with 2-(3-hydroxypropylamino)-3-cyano-4-methyl-6-(3-methoxpropylamino)pyridine, forming II, .lambda.max 456 nm, which dyed polyester fabrics in a fast, golden-yellow shade.

IT **113784-90-0P 113785-16-3P 113785-17-4P 113798-86-0P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(manuf. of, as dye for polyester fibers)

RN 113784-90-0 CAPLUS
CN 2-Propenamide, 3-[4-[[6-[[3-[4-(acetyloxy)butoxy]propyl]amino]-5-cyano-2-[(3-methoxypropyl)amino]-4-methyl-3-pyridinyl]azo]phenyl]-2-cyano-N-(3-methoxypropyl)- (9CI) (CA INDEX NAME)

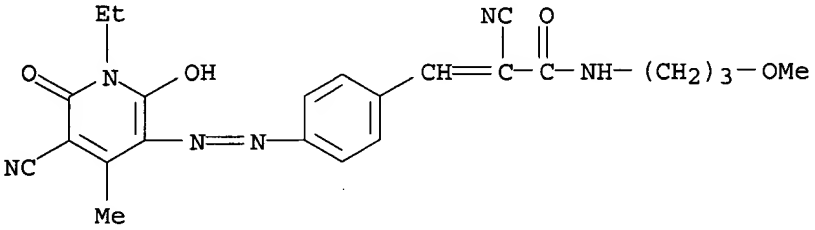
PAGE 1-A



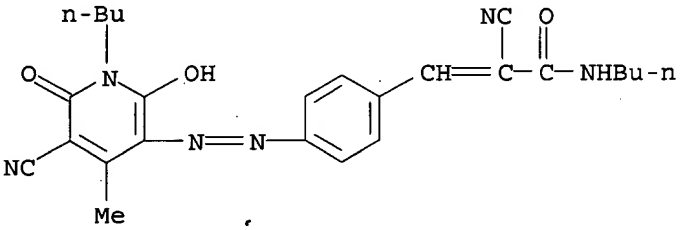
PAGE 1-B

— $(CH_2)_3$ — OMe

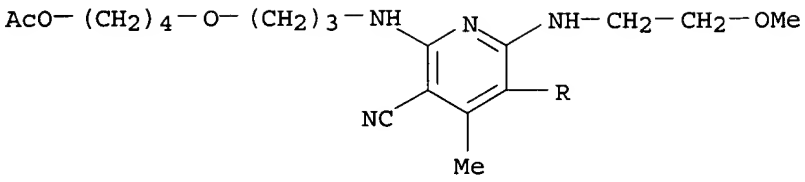
RN 113785-16-3 CAPLUS
CN 2-Propenamide, 2-cyano-3-[4-[(5-cyano-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl)azo]phenyl]-N-(3-methoxypropyl)- (9CI) (CA INDEX NAME)

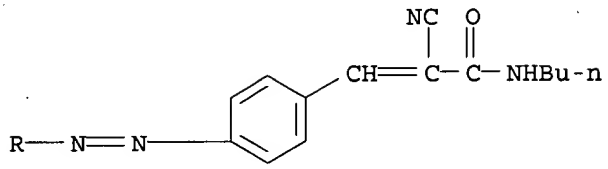


RN 113785-17-4 CAPLUS
CN 2-Propenamide, N-butyl-3-[4-[(1-butyl-5-cyano-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl)azo]phenyl]-2-cyano- (9CI) (CA INDEX NAME)



RN 113798-86-0 CAPLUS
CN 2-Propenamide, 3-[4-[[6-[[3-[4-(acetyloxy)butoxy]propyl]amino]-5-cyano-2-[(2-methoxyethyl)amino]-4-methyl-3-pyridinyl]azo]phenyl]-N-butyl-2-cyano- (9CI) (CA INDEX NAME)





L4 ANSWER 46 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1987:631431 CAPLUS
DOCUMENT NUMBER: 107:231431
TITLE: Preparation of enol derivatives as herbicades
INVENTOR(S): Ashmore, John William
PATENT ASSIGNEE(S): Rohm and Haas Co., USA
SOURCE: Eur. Pat. Appl., 92 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

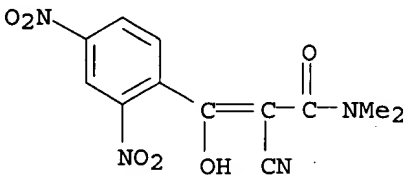
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 213892	A2	19870311	EP 1986-306472	19860821
EP 213892	A3	19890118		
EP 213892	B1	19920325		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
US 4781750	A	19881101	US 1985-770033	19850827
AU 8661184	A1	19870305	AU 1986-61184	19860815
BR 8604064	A	19871117	BR 1986-4064	19860826
JP 62084040	A2	19870417	JP 1986-199199	19860827

PRIORITY APPLN. INFO.: US 1985-770033 19850827
EP 1986-306472 19860821

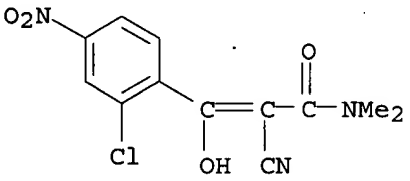
AB Herbicidal compns. comprise the enols ABC:CW(OV) [A = COR, CO2R; R = alkyl, (un)substituted cycloalkyl; CONR1R2; R1, R2 = alkyl; NR1R2 = heterocyclyl; B = CN, COR3, CO2R3; R3 = H, alkyl; SOnR4; R4 = alkyl, haloalkyl, cyanoalkyl, (un)substituted cycloalkyl or Ph; V = H, alkyl, alkylcarbonyl, etc.; W = (un)substituted heterocyclyl, substituted Ph; n = 0-2], their geometric isomers or tautomers, halogen addn. products and salts. A mixt. of 3-oxo-4,4-dimethylpentanonitrile Mg salt (prepn. given) was refluxed with 2-nitrobenzoyl chloride in toluene to give 2-cyano-4,4-dimethyl-1-hydroxy-3-oxo-1-(2-nitrophenyl)-1-pentene (I). Pre-emergence 2.24 lb I-acre gave 96% control of monocotyledonous weed and 25% control of dicotyledonous weeds.

IT **110964-12-0P 110964-30-2P**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as herbicide)
RN 110964-12-0 CAPLUS
CN 2-Propenamide, 2-cyano-3-(2,4-dinitrophenyl)-3-hydroxy-N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 110964-30-2 CAPLUS
CN 2-Propenamide, 3-(2-chloro-4-nitrophenyl)-2-cyano-3-hydroxy-N,N-dimethyl- (9CI) (CA INDEX NAME)

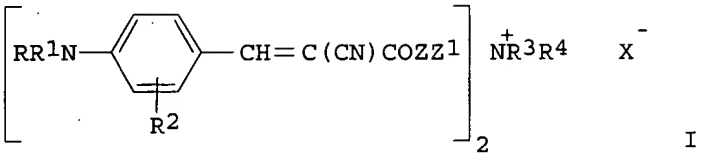


L4 ANSWER 47 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1981:463685 CAPLUS
DOCUMENT NUMBER: 95:63685
TITLE: Basic dyes
INVENTOR(S): Eisert, Manfred; Grychtol, Klaus
PATENT ASSIGNEE(S): BASF A.-G. , Fed. Rep. Ger.
SOURCE: Ger. Offen., 11 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2942185	A1	19810430	DE 1979-2942185	19791018
CA 1133923	A1	19821019	CA 1980-360590	19800919
EP 27611	A2	19810429	EP 1980-106163	19801010
EP 27611	A3	19810506		
EP 27611	B1	19830518		
R: BE, CH, DE, FR, GB, IT, LU, NL, SE				
JP 56065048	A2	19810602	JP 1980-145088	19801018
JP 63060793	B4	19881125		
US 4597912	A	19860701	US 1985-735298	19850517
US 4720568	A	19880119	US 1986-826987	19860207

PRIORITY APPLN. INFO.: DE 1979-2942185 19791018
US 1980-188264 19800917
US 1985-735298 19850517

GI



I

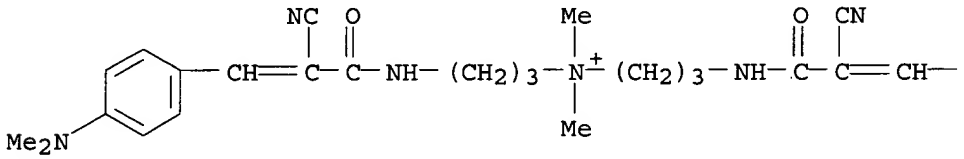
AB Basic dyes (I; R, R1 = optionally substituted C1-4 alkyl, cyclohexyl, benzyl, phenylethyl, or phenyl; RR1N = heterocycle; R2 = H, Cl, Br, Me, Et, MeO, EtO, NO2; R3, R4 = H, C1-4 alkyl, benzyl; Z = O, NH; Z1 = C2-6 alkylene; X- = anion) are prepd. and used to dye paper in fast greenish yellow shades with little coloration of the dyeing waste water. Thus, cyanoacetic acid [372-09-8] was heated in Ac2O, Et2N+(CH2CH2OH)2 Cl- [22933-33-1] and p-Et2NC6H4CHO [120-21-8] were added, and the mixt. was held at 90.degree. for 3 h and worked up to give I(R = R1 = R3 = R4 = Et, R2 = H, Z = O, Z1 = CH2CH2, X- = Cl-) [78182-01-1]. Three other I were similarly prepd.

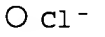
IT **78181-90-5**
RL: USES (Uses)
(dye, for paper, prepn. of)

RN 78181-90-5 CAPLUS

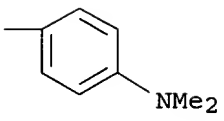
CN 1-Propanaminium, 3-[[2-cyano-3-[4-(dimethylamino)phenyl]-1-oxo-2-propenyl]amino]-N-[3-[[2-cyano-3-[4-(dimethylamino)phenyl]-1-oxo-2-propenyl]amino]propyl]-N,N-dimethyl-, chloride (9CI) (CA INDEX NAME)

PAGE 1-A





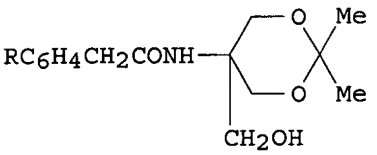
PAGE 1-B



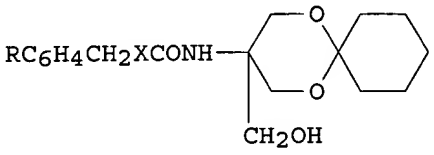
L4 ANSWER 48 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1981:407174 CAPLUS
DOCUMENT NUMBER: 95:7174
TITLE: Synthesis, structure and neoplasm-inhibiting activity of some p-substituted N,N-bis(2-chloroethyl)anilines
AUTHOR(S): Belogorodskii, V. V.; Myuller, N. R.; Filov, V. A.; Ivin, B. A.

09772617

CORPORATE SOURCE: Nauchno-Issled. Inst. Onkol. im. Petrova, Leningrad, USSR
SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1981), 15(3), 20-5
CODEN: KHFZAN; ISSN: 0023-1134
DOCUMENT TYPE: Journal
LANGUAGE: Russian
GI



III

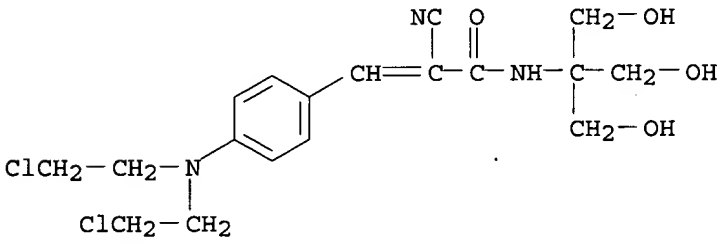


IV

AB Treatment of RC6H4CH2COCl.cntdot.HCl [R = p-(ClCH2CH2)2N throughout] with H2NC(CH2OH)3 (I) gave 50% RC6H4CH2CONHC(CH2OH)3 (II), which was cyclocondensed with Me2C(OEt)2 to give 74.5% III or with cyclohexanone di-Et acetal to give 70% IV (X = bond). Acetylation of II gave 78% RC6H4CH2CONHC(CH2OAc)3 (V). Condensation of EtO2CCH2CN with I gave 56% NCCH2CONHC(CH2OH)3 which was condensed with RC6H4CHO to give 70.3% RC6H4CH:C(CN)CONHC(CH2OH)3 (VI). Redn. of the latter with NaBH4 gave 63.7% RC6H4CH2CH(CN)CONHC(CH2OH)3 (VII), which was cyclocondensed with cyclohexanone di-Et acetal to give 52% IV (X = CHCN). Compds. II-VII were effective inhibitors for Sarcomas 37, 45, and 180.

IT **77898-37-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and neoplasm-inhibiting activity of)

RN 77898-37-4 CAPLUS
CN 2-Propenamide, 3-[4-[bis(2-chloroethyl)amino]phenyl]-2-cyano-N-[2-hydroxy-1,1-bis(hydroxymethyl)ethyl]- (9CI) (CA INDEX NAME)



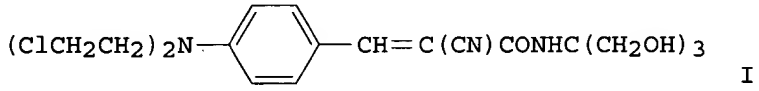
L4 ANSWER 49 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1981:406864 CAPLUS
DOCUMENT NUMBER: 95:6864
TITLE: 4-[Bis(2-chloroethyl)-4-amino]benzylidenecyanoacetic acid trihydroxy-tert-butylamide with antineoplastic activity
INVENTOR(S): Belogorodskii, V. V.; Myuller, N. R.; Ivin, B. A.; Filov, V. A.
PATENT ASSIGNEE(S): Scientific-Research Institute of Oncology, USSR

09772617

SOURCE: U.S.S.R. From: Otkrytiya, Izobret., Prom. Obraztsy, Tovarnye Znaki 1981, (1), 242.
CODEN: URXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 677284	T	19810107	SU 1978-2563672	19780104

PRIORITY APPLN. INFO.: SU 1978-2563672 19780104
GI



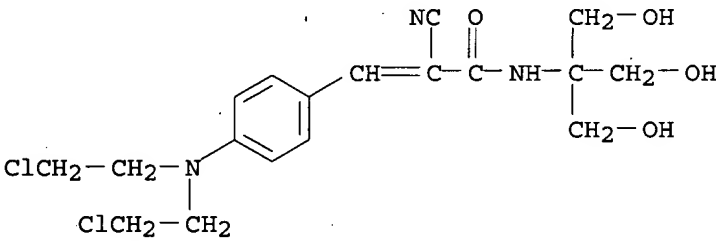
I

AB The title compd.(I) was prepd. by refluxing trihydroxy-tert-butylamine in abs. EtOH with cyanoacetic ester and the resulting cyanoacetic acid trihydroxy-tert-butylamide was reacted in dioxane with 4-[bis(2-chloroethyl)amino]benzaldehyde in the presence of a basic piperidine catalyst.

IT **77898-37-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 77898-37-4 CAPLUS

CN 2-Propenamide, 3-[4-[bis(2-chloroethyl)amino]phenyl]-2-cyano-N-[2-hydroxy-1,1-bis(hydroxymethyl)ethyl]- (9CI) (CA INDEX NAME)

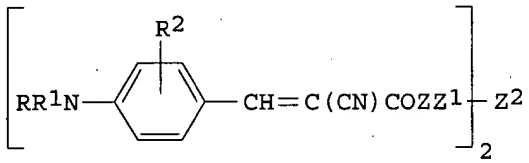


L4 ANSWER 50 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1980:216734 CAPLUS
DOCUMENT NUMBER: 92:216734
TITLE: Basic dyes
INVENTOR(S): Grychtol, Klaus
PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.
SOURCE: Ger. Offen., 11 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

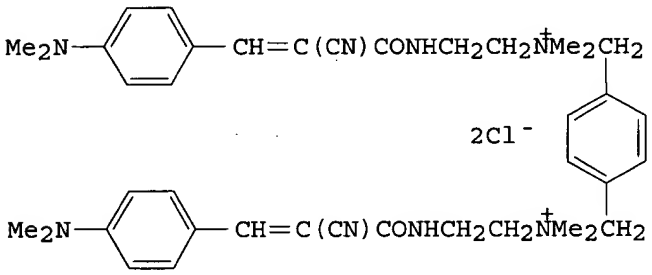
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2826981	A1	19800117	DE 1978-2826981	19780620
DE 2826981	C2	19870409		
FR 2434844	A1	19800328	FR 1979-12165	19790514
FR 2434844	B1	19821105		
US 4280964	A	19810728	US 1979-45866	19790606
JP 55003483	A2	19800111	JP 1979-74089	19790614
JP 63001348	B4	19880112		
CH 643283	A	19840530	CH 1979-5640	19790615
GB 2026522	A	19800206	GB 1979-21311	19790619
GB 2026522	B2	19821110		

PRIORITY APPLN. INFO.: DE 1978-2826981 19780620

GI



I



II

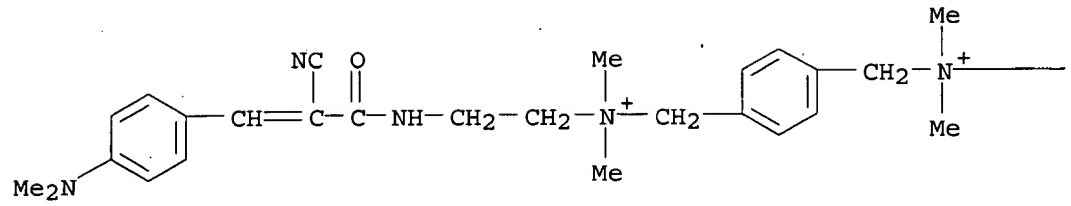
AB Basic dyes of general structure I are prepd., where R and R1 (independently) = HO, alkoxy, CN, carbalkoxy, amino, Br- or Cl-substituted alkyl, cyclohexyl, benzyl, phenethyl, or Ph, RR1N = pyrrolidino, piperidino, morpholino, or N-methylpiperazino, R2 = H, Cl, Br, alkyl, alkoxy, or NO2, Z = O or imino, Z1 = alkylene, and Z2 = bridging group (esp. a bisquaternary ammonium group). I are yellow dyes for paper. Thus, reaction of NCCH2CONHCH2CH2NMe2 [15029-55-7] with p-C6H4(CH2Cl)2 [623-25-6] in MeOCH2CH2OH at reflux, addn. of p-Me2NC6H4CHO [100-10-7] and piperidine, heating at 120.degree., cooling, and diln. with Me2CO gave II [**73570-64-6**]. Bleached sulfite pulp was dyed greenish yellow by II and the resultant wastewater had only a faint yellow color.

IT **73570-64-6P**
RL: PREP (Preparation)
(manuf. of, as a dye for paper)

RN 73570-64-6 CAPLUS

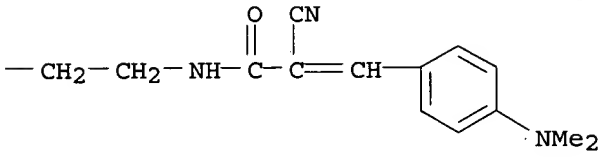
CN 1,4-Benzenedimethanaminium, N,N'-bis[2-[[2-cyano-3-[4-(dimethylamino)phenyl]-1-oxo-2-propenyl]amino]ethyl]-N,N,N',N'-tetramethyl-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



O_2 Cl^-

PAGE 1-B



L4 ANSWER 51 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1973:467820 CAPLUS
DOCUMENT NUMBER: 79:67820
TITLE: Quaternary styryl dyes
INVENTOR(S): Bauman, Donald L.
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co.
SOURCE: U.S., 5 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3742012	A	19730626	US 1972-217934	19720113
IT 972892	A	19740531	IT 1972-33558	19721222
CA 1003848	A1	19770118	CA 1973-160627	19730105
FR 2167890	A1	19730824	FR 1973-725	19730110
GB 1377933	A	19741218	GB 1973-1343	19730110
BE 794010	A1	19730502	BE 1973-126431	19730112
DE 2301495	A1	19730726	DE 1973-2301495	19730112
JP 48079829	A2	19731026	JP 1973-6334	19730113
JP 51016207	B4	19760522		

PRIORITY APPLN. INFO.: US 1972-217934 19720113

AB Quaternary styryl dyes (I, R, R1 = Me, Et, CH2CH2CN; R2 = H, Me; R3 = Me, Et, PhCH2, cyclohexyl; R4, R5 = Me, Et; Q = OCH2CH2, NH(CH2)3; X = Cl, MeSO4, AcO or their mixts) were prepd. and were used to dye paper bleachable, greenish yellow shades. Thus, a mixt. of NCCH2CO2Et and Me2NCH2CH2OH was refluxed in cyclohexane with isopropyl titanoate as a catalyst and the EtOH-cyclohexane azeotrope was removed. The mixt. was cooled and treated with Me2SO4 to give (.beta.-cyanoacetoxyethyl)trimethylammonium methosulfate [41621-99-2] which was

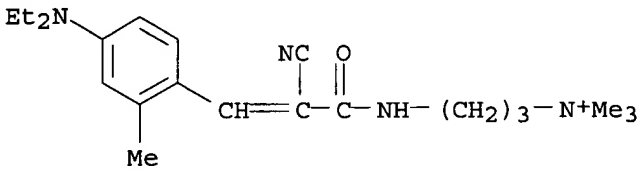
condensed with Et2NC6H4CHO in DMF with a piperidine catalyst to give styryl dye I(R = R1 = Et; R2 = H; R3 = R4 = R5 = Me; Q = OCH2CH2; X = MeSO4) [41622-00-8]. The other I were similarly prepd.

IT **42876-66-4P 42876-67-5P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)

RN 42876-66-4 CAPLUS
CN 1-Propanaminium, 3-[[2-cyano-3-[4-(diethylamino)-2-methylphenyl]-1-oxo-2-propenyl]amino]-N,N,N-trimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

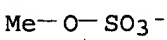
CM 1

CRN 48213-76-9
CMF C21 H33 N4 O

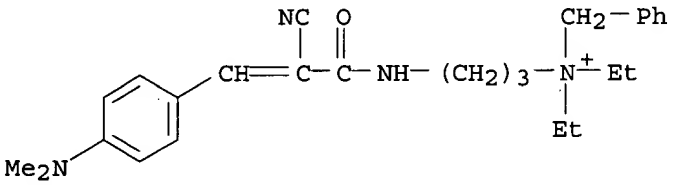


CM 2

CRN 21228-90-0
CMF C H3 O4 S



RN 42876-67-5 CAPLUS
CN Benzenemethanaminium, N-[3-[[2-cyano-3-[4-(dimethylamino)phenyl]-1-oxo-2-propenyl]amino]propyl]-N,N-diethyl-, chloride (9CI) (CA INDEX NAME)



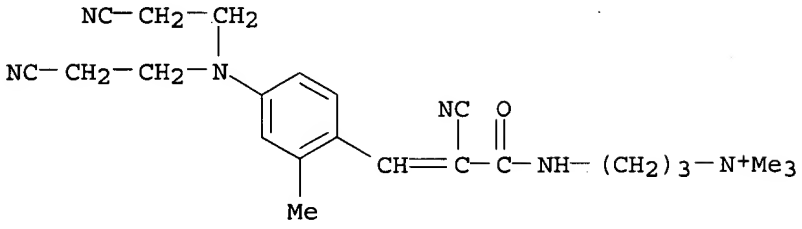
IT **42876-80-2 42876-81-3 42876-82-4 42982-93-4**
RL: PRP (Properties)
(spectrum of)

RN 42876-80-2 CAPLUS
CN 1-Propanaminium, 3-[[3-[4-[bis(2-cyanoethyl)amino]-2-methylphenyl]-2-cyano-1-oxo-2-propenyl]amino]-N,N,N-trimethyl-, methyl sulfate (9CI) (CA INDEX

NAME)

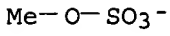
CM 1

CRN 48224-30-2
CMF C23 H31 N6 O



CM 2

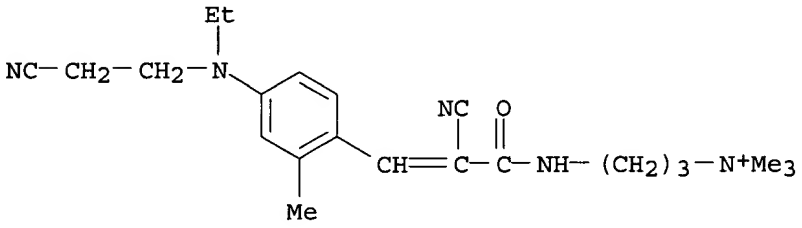
CRN 21228-90-0
CMF C H3 O4 S



RN 42876-81-3 CAPLUS
CN 1-Propanaminium, 3-[[2-cyano-3-[4-[(2-cyanoethyl)ethylamino]-2-methylphenyl]-1-oxo-2-propenyl]amino]-N,N,N-trimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

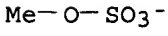
CM 1

CRN 48219-40-5
CMF C22 H32 N5 O



CM 2

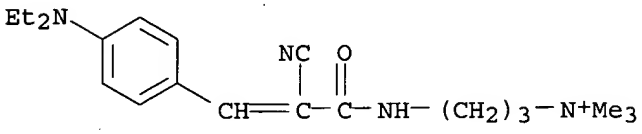
CRN 21228-90-0
CMF C H3 O4 S



RN 42876-82-4 CAPLUS
CN 1-Propanaminium, 3-[[2-cyano-3-[4-(diethylamino)phenyl]-1-oxo-2-propenyl]amino]-N,N,N-trimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

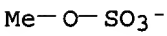
CM 1

CRN 48209-91-2
CMF C20 H31 N4 O



CM 2

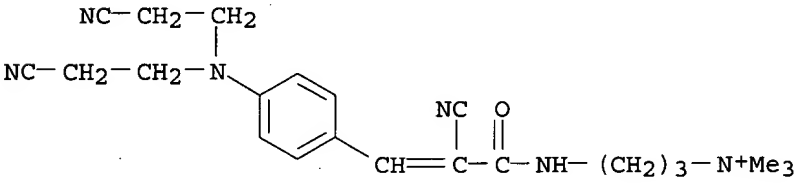
CRN 21228-90-0
CMF C H3 O4 S



RN 42982-93-4 CAPLUS
CN 1-Propanaminium, 3-[[3-[4-[bis(2-cyanoethyl)amino]phenyl]-2-cyano-1-oxo-2-propenyl]amino]-N,N,N-trimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

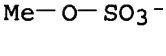
CM 1

CRN 49869-62-7
CMF C22 H29 N6 O



CM 2

CRN 21228-90-0
CMF C H3 O4 S



L4 ANSWER 52 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1972:421592 CAPLUS

09772617

DOCUMENT NUMBER: 77:21592
TITLE: Sensitizing dyes for electrophotographic layers
INVENTOR(S): Kampfer, Helmut; Ohlschlager, Hans; Gesierich, Wolf
PATENT ASSIGNEE(S): Agfa-Gevaert A.-G.
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3635706	A	19720118	US 1966-551033	19660518
DE 1497118	A	19690417	DE 1965-A49348	19650529
BE 681793	A	19661130	BE 1966-681793	19660531

PRIORITY APPLN. INFO.: DE 1965-A49348 19650529

AB Sixty-three styryl dyes (I, R = H, Me, substituted alkyl; R1 = Me, substituted alkyl or phenyl; R2 = H, Br, Cl, Me, NO2; R3 = CN, aryl- or alkylsulfonyl, aroyl, carbalkoxy, carbamoyl, or thiocarbamoyl) were prepd. and used to sensitize electrophotog. layers contg. ZnO as a photoconductor. For example, p-Me2NC6H4CHO was condensed with p-MeC6H4SO2CH2CN to give a sensitizer dye (I, R = R1 = Me, R2 = H, R3 = p-Me6C6H4SO2) [16092-97-0].

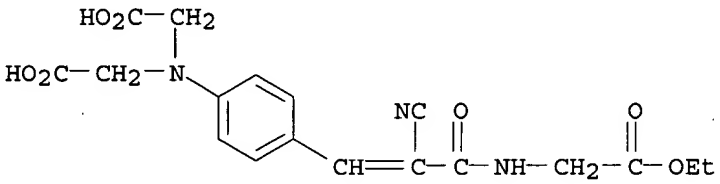
IT **16092-66-3P 16093-01-9P 16093-03-1P**
37400-98-9P 37400-99-0P 37401-34-6P
37401-35-7P 37401-36-8P 37401-40-4P
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)

RN 16092-66-3 CAPLUS

CN Glycine, N-[3-[4-[bis(carboxymethyl)amino]phenyl]-2-cyano-1-oxo-2-propenyl]-, 1-ethyl ester, compd. with piperidine (9CI) (CA INDEX NAME)

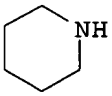
CM 1

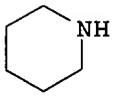
CRN 47588-87-4
CMF C18 H19 N3 O7



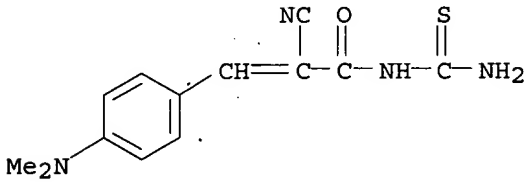
CM 2

CRN 110-89-4
CMF C5 H11 N





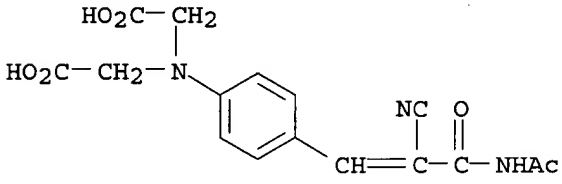
RN 16093-01-9 CAPLUS
CN 2-Propenamide, N-(aminothioxomethyl)-2-cyano-3-[4-(dimethylamino)phenyl]-
(9CI) (CA INDEX NAME)



RN 16093-03-1 CAPLUS
CN Glycine, N-[4-[3-(acetylamino)-2-cyano-3-oxo-1-propenyl]phenyl]-N-
(carboxymethyl)-, compd. with piperidine (9CI) (CA INDEX NAME)

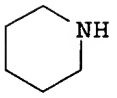
CM 1

CRN 47454-12-6
CMF C16 H15 N3 O6



CM 2

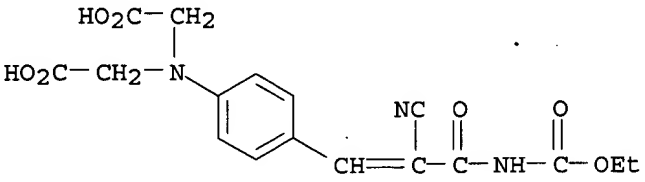
CRN 110-89-4
CMF C5 H11 N



RN 37400-98-9 CAPLUS
CN Glycine, N-(carboxymethyl)-N-[4-[2-cyano-3-[(ethoxycarbonyl)amino]-3-oxo-1-
propenyl]phenyl]-, compd. with piperidine (9CI) (CA INDEX NAME)

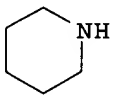
CM 1

CRN 47551-26-8
CMF C17 H17 N3 O7



CM 2

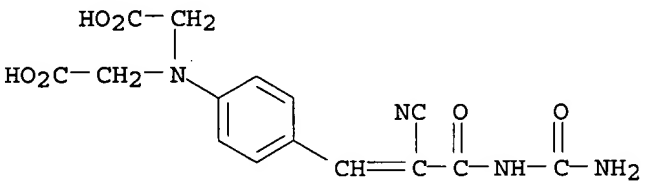
CRN 110-89-4
CMF C5 H11 N



RN 37400-99-0 CAPLUS
CN Glycine, N-[4-[3-[(aminocarbonyl)amino]-2-cyano-3-oxo-1-propenyl]phenyl]-N-(carboxymethyl)-, compd. with piperidine (9CI) (CA INDEX NAME)

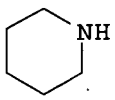
CM 1

CRN 47454-13-7
CMF C15 H14 N4 O6

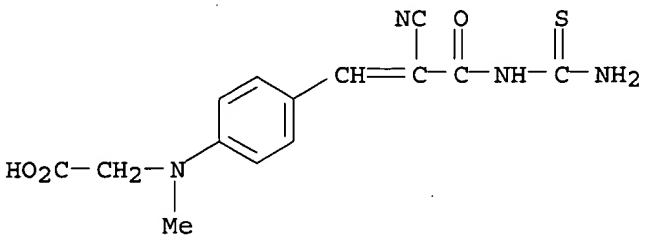


CM 2

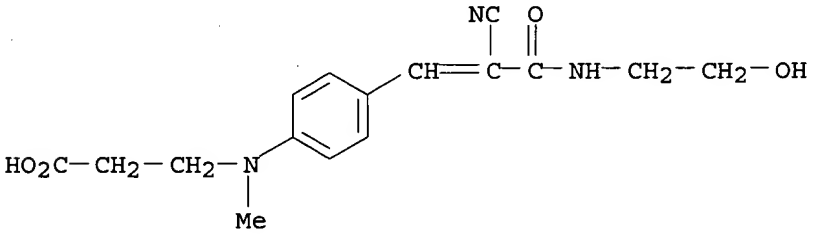
CRN 110-89-4
CMF C5 H11 N



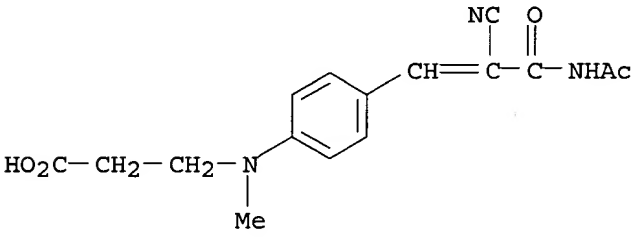
RN 37401-34-6 CAPLUS
CN Glycine, N-[4-[3-[(aminothioxomethyl)amino]-2-cyano-3-oxo-1-propenyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)



RN 37401-35-7 CAPLUS
CN .beta.-Alanine, N-[4-[2-cyano-3-[(2-hydroxyethyl)amino]-3-oxo-1-propenyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)



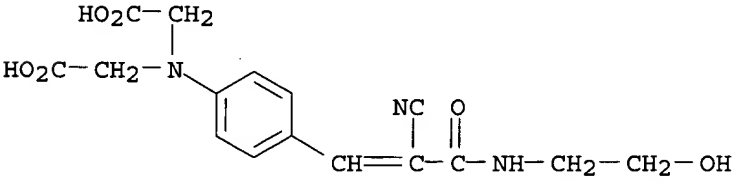
RN 37401-36-8 CAPLUS
CN .beta.-Alanine, N-[4-[3-(acetylamino)-2-cyano-3-oxo-1-propenyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)



RN 37401-40-4 CAPLUS
CN Glycine, N-(carboxymethyl)-N-[4-[2-cyano-3-[(2-hydroxyethyl)amino]-3-oxo-1-propenyl]phenyl]-, compd. with piperidine (9CI) (CA INDEX NAME)

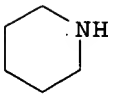
CM 1

CRN 47454-14-8
CMF C16 H17 N3 O6



CM 2

CRN 110-89-4
CMF C5 H11 N



L4 ANSWER 53 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1970:467676 CAPLUS
DOCUMENT NUMBER: 73:67676
TITLE: Fugitive polymeric azo dyes
INVENTOR(S): Cohen, Werner V.; Kissa, Erik
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co.
SOURCE: U.S., 18 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

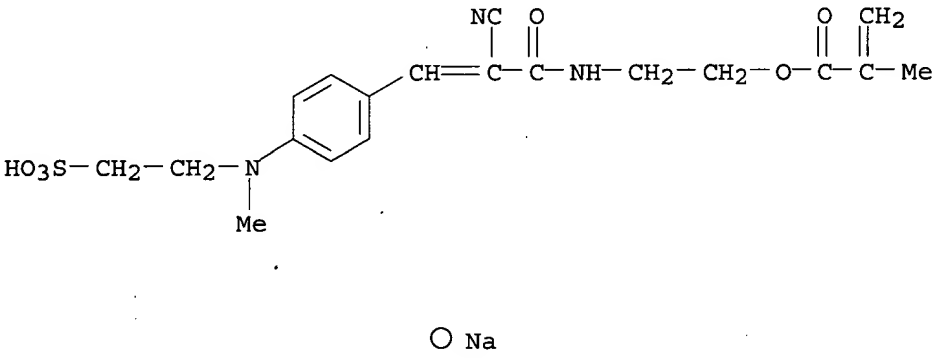
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3507850	A	19700421	US 1966-552715	19660525

PRIORITY APPLN. INFO.: US 1966-552715 19660525
GI For diagram(s), see printed CA Issue.
AB Polymeric dyes contg. azo or anthraquinone chromophores are prepd. by copolymg. the appropriate dye, contg. a CH2:CMeCONH or CH2:CMeCO2 group, with CH2:CMeCO2H (I) and CH2:CMeCO2R (R = Me, Et, Bu, n-C6H13, N-C8H17) using [Me2C(CN)N:]2 (II) as initiator. The monomeric dyes are prepd. by reacting a diazonium salt with a coupler bearing a CH2:CMeCO group, or by reacting a dye bearing a free NH2 or OH group with CH2:CMeCOCl (III). Thus, 0.2 mole 8,1,3,6-H2N(HO)C10H4(SO3Na)2 in 1000 parts H2O was adjusted to pH 7 (2N NaOH) and treated at 0-5.degree.C and pH 5-7 with 30 parts III during 2 hr. The resulting soln. was treated with a diazo soln. from 18.6 parts PhNH2 to give IV, .lambda.max. 506 nm. A mixt. of I 63, CH2:CMeCO2Bu 261, and IV 17.5 in iso-PrOH 1100 and H2O 900 parts was heated to 80.degree.C, treated with 3 parts II, treated with 63 parts I during 2 hr, heated for 20 hr, cooled to 25.degree.C, treated with 112 parts 28% aq. NH3, and poured into 4000 parts H2O and 900 parts 2N HCl to ppt. a red polymer (.lambda.max. 510 nm). The polymeric dye was applied from dil. aq. NH3 to give a red tint which is completely removed on soap scouring from acetate rayon, acrylic, triacetate, cotton, polyester, nylon, silk, viscose rayon, and wool fibers, even if steaming at 220.degree.F precedes scouring. A series of 51 addnl. monoazo dye monomers, 24 disazo dye monomers, and 2 methine and 4 anthraquinone dye monomers was prepd.
IT **28499-76-5P**, preparation
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)
RN 28499-76-5 CAPLUS
CN Methacrylic acid, polymer with butyl methacrylate and N-[p-[2-cyano-2-[(2-hydroxyethyl)carbamoyl]vinyl]phenyl]-N-methyltaurine methacrylate (ester)

monosodium salt (8CI) (CA INDEX NAME)

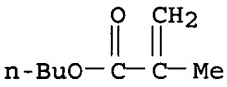
CM 1

CRN 47635-87-0
CMF C19 H23 N3 O6 S . Na



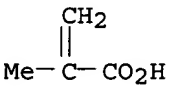
CM 2

CRN 97-88-1
CMF C8 H14 O2



CM 3

CRN 79-41-4
CMF C4 H6 O2



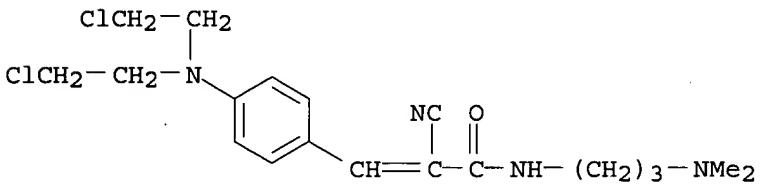
L4 ANSWER 54 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1970:435288 CAPLUS
DOCUMENT NUMBER: 73:35288
TITLE: Antitumor agents derived from benzaldehyde nitrogen mustards
AUTHOR(S): Florvall, Lennart
CORPORATE SOURCE: Res. Develop. Lab., AB Astra, Sodertalje, Swed.
SOURCE: Acta Pharmaceutica Suecica (1970), 7(2), 87-104
CODEN: APSXAS; ISSN: 0001-6675
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The synthesis of some new derivs. of 4-[bis(2-chloroethyl)amino]benzaldehyde is described. N,N-Bis(2-hydroxyethyl)aniline was converted to 4-[bis(2-bromoethyl)amino]benzaldehyde in one step by reaction with PBr3 in HCONMe2. Appropriate benzaldehyde N mustards were condensed with 4-(3-dimethylaminopropyl)thiosemicarbazide, aminoguanidines, 4-amino-3-hydrazino-1,2,4-triazoles and miscellaneous derivs. of hydrazine. In addn. some compds. related to 4-[bis(2-chloroethyl)amino]-.alpha.-cyanocinnamamide were preped. Representative products were evaluated against the Walker rat tumor 256 and L 1210 lymphoid leukemia in mice. Significant activity against the Walker tumor system was shown by compds. contg. the 1,2,4-triazole ring system. Of these, 4-amino-3-[4-[bis(2-chloroethyl)amino]benzylidenehydrazino]-1,2,4-triazole hydrochloride and its 2-Me homolog gave a total inhibition of the tumor at non-toxic doses. A few of the compds. prepd. showed some activity against leukemia L 1210.

IT **27466-70-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 27466-70-2 CAPLUS

CN Cinnamamide, p-[bis(2-chloroethyl)amino]-.alpha.-cyano-N-[3-(dimethylamino)propyl]- (8CI) (CA INDEX NAME)



L4 ANSWER 55 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1967:47320 CAPLUS
DOCUMENT NUMBER: 66:47320
TITLE: Reactive dyes
INVENTOR(S): Boresch, Carl; Raue, Roderich
PATENT ASSIGNEE(S): Farbenfabriken Bayer A.-G.
SOURCE: Ger., 7 pp.
CODEN: GWXXAW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1229212		19661124	DE	19610307

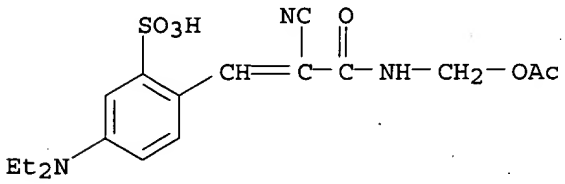
AB Azo, methine, and anthraquinone dyes contg. a group of the formula -C(Y)N(R)CH(R1)O2CR2 (I) were prepd.; in I, Y = O or NH, R and R1 = H or a substituent, and R2 is alkyl. The dyes, useful for dyeing cellulose fibers wetfast shades from an acid bath, were prepd. by treatment of dyes contg. a RNHC(Y) group with an aliphatic aldehyde and esterifying the resulting methylol compds. with an aliphatic carboxylic acid. Thus, a mixt. of 5 parts 4-HO3SC6H4NH2 (II) .fwdarw. 1-phenyl-3-carbamoyl-5-pyrazolone (III), 1.5 parts paraformaldehyde (IV) and 15 parts AcOH (V) was heated at 80-5.degree. for 40 min., 5 parts Ac2O added held at

80.degree. for 10 min., cooled, and evapd. in vacuo to give a fast bright yellow dye for cotton. Similarly, the following dyes were prepd. (starting dye, aldehyde, carboxylic acid, and shade on cotton given): II .fwdarw. 3-methyl-5-pyrazolone, IV, V, greenish yellow; 2,4-HO3S(Et2N)C6H3CH:C(CN)CONH2, IV, V, yellow; 1-amino-4-(4-carbamoylanilino)anthraquinone-2-sulfonic acid, IV, V, blue; 4-H2NCOC6H4NH2 (VI) .fwdarw. 1-(4-sulfophenyl)-3-methyl-5-pyrazolone, IV, EtCO2H (VII), reddish yellow; VI .fwdarw. 1,8,3,6,-HO(AcNH)C10H4(SO3H)2 (VIII), IV, VII, blush red; VI .fwdarw. 1,6,3,-HO(BzNH)C10H5SO3H (IX), IV, VII, yellowish red; II .fwdarw. 2,3-HOC10H6CONH2 (X)IV, VII, yellowish red; VI .fwdarw. VIII, Me-CHO, V, reddish violet; VI .fwdarw. 2,6-HOC10H6SO3H (XI), EtCHO, V, yellow-orange; VI .fwdarw. VIII, Cl3CHO.H2O, V, bluish-red; Cr complex of 2,3,5-HO(O2N)(HO3S)C6H2NH2 .fwdarw. III, IV, V, bluishred; VI .fwdarw. 1-(4-sulfophenyl)-3-methyl-5-pyrazolone (XII), IV, V, yellow; 4-MeNHCOC6H4NH2 .fwdarw. XII, IV, V, greenish yellow; [2,4-HO3S(H2N)C6H3CH2]2 .fwdarw. 2 moles III, IV, V, reddish yellow; VI .fwdarw. 1,6,3-HO(H2N)C10H5SO3H, IV, V, yellowish scarlet; VI .fwdarw. XI, IV, V, reddish orange; VI .fwdarw. VIII, IV, V, yellowish red; VI .fwdarw. IX, IV, V, red; methine dye from 1,3,3-trimethyl-2-methyleneindoline-5-sulfonic acid and 1-phenyl-3-carbamoyl-4-(dimethylaminomethylene)-5-pyrazolone, IV, V, yellowish orange, II .fwdarw. X, IV, V, red; 2-HO3SC6H4NH2 .fwdarw. X, IV, V, reddish orange; 2:1 Cr complex of 2,4-HO(HO3S)C6H3NH2 (XIII) .fwdarw. III, IV, V, bluish red; 2:1 Cr complex of XIII .fwdarw. X, IV, V, violet; 1-amino-4-(4-ureidoanilino)anthraquinone-2-sulfonic acid, IV, V, blue; 3-H2NCONHC6H4NH2 (XIV) .fwdarw. XII, IV, V, reddish yellow; 2:1 Cr complex of 2,3,5-HO(HO3S)(O2N)C6H2NH2 .fwdarw. III, IV, V, yellowish brown; 1-amino-4-(2-carbamoylanilino)anthraquinone-2-sulfonic acid, IV, V, reddish blue; 2-H2NCOC6H4NH2 .fwdarw. 1-(2-sulfophenyl)-3-methyl-5-pyrazolone (XV), IV, V, reddish yellow; XIV .fwdarw. XV, IV, V, reddish yellow; XIV .fwdarw. 1-(4,8-disulfonaphthyl)-3-methyl-5-pyrazolone, IV, V, greenish yellow.

IT **14662-66-9P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)

RN 14662-66-9 CAPLUS

CN Metanilic acid, 6-[2-cyano-2-[(hydroxymethyl)carbamoyl]vinyl]-N,N-diethyl-, acetate (ester) (8CI) (CA INDEX NAME)



L4 ANSWER 56 OF 57 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1967:42340 CAPLUS
DOCUMENT NUMBER: 66:42340
TITLE: Spectrally sensitized electrophotographic systems
PATENT ASSIGNEE(S): Gevaert-Agfa N. V.
SOURCE: Neth. Appl., 18 pp.
CODEN: NAXXAN
DOCUMENT TYPE: Patent
LANGUAGE: Dutch

FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 6607403	A	19661025	NL 1966-7403	19660527
DE 1497118	A	19690417	DE 1965-A49348	19650529
BE 681793	A	19661130	BE 1966-681793	19660531

PRIORITY APPLN. INFO.: DE 1965-A49348 19650529

GI For diagram(s), see printed CA Issue.

AB Use is made of styryl dyes of the general formula I, where R1 and R2 are H, alkyl, aryl, or other groups forming a 5- or 6-membered heterocyclic ring; R3 is a H, alkyl, halogen, nitrile, or nitro group; and R4 is a nitrile, carboxyl, sulfonic acid, or acyl group. Such dyes are best suited for use with electrophotographic systems based on ZnO and have absorption max. of 420-80 m.mu.. The spectral sensitizing effect does not decrease on storage of the coated material, and layers contg. the dye are almost colorless. Thus, the piperidine salt of I (R1 = R3 = CH2CO2H; R3 is H; and R4 is CONHCH2CO2Et) was prepd. by refluxing p-aminobenzaldehyde-N, N-diacetic acid (2.4 g.) with cyanoacetylglycine Et ester (1.9 g.) dissolved in EtOH (30 ml.) contg. piperidine (3 ml.). After 10 min., AcOH, was added and the ppt. was collected and recrystd. from iso-PrOH. The desired product was obtained in a yield of 3.6 g. (m. 181-2.degree.). The dye was adsorbed on 100 g. granulated ZnO from 100 ml. of 0.01% soln. in MeOH. Excess solvent was removed by evapn. and the ZnO was dispersed in a suitable binding agent (e.g. a phenyl methyl siloxane resin) and coated on paper using conventional techniques.

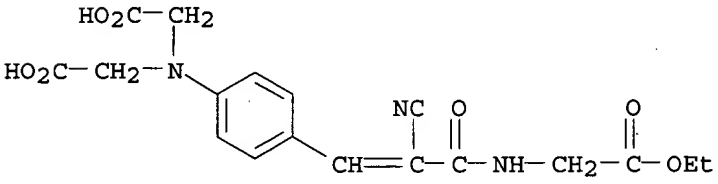
IT **16092-66-3 16093-01-9 16093-03-1**
RL: USES (Uses)
(as sensitizer for zinc oxide photoconductor for electrophotography)

RN 16092-66-3 CAPLUS

CN Glycine, N-[3-[4-[bis(carboxymethyl)amino]phenyl]-2-cyano-1-oxo-2-propenyl]-, 1-ethyl ester, compd. with piperidine (9CI) (CA INDEX NAME)

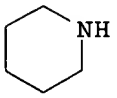
CM 1

CRN 47588-87-4
CMF C18 H19 N3 O7

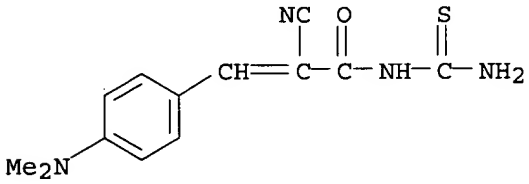


CM 2

CRN 110-89-4
CMF C5 H11 N



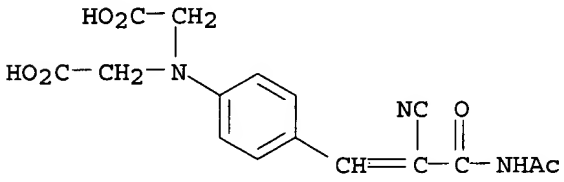
RN 16093-01-9 CAPLUS
CN 2-Propenamide, N-(aminothioxomethyl)-2-cyano-3-[4-(dimethylamino)phenyl]-
(9CI) (CA INDEX NAME)



RN 16093-03-1 CAPLUS
CN Glycine, N-[4-[3-(acetylamino)-2-cyano-3-oxo-1-propenyl]phenyl]-N-
(carboxymethyl)-, compd. with piperidine (9CI) (CA INDEX NAME)

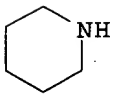
CM 1

CRN 47454-12-6
CMF C16 H15 N3 O6



CM 2

CRN 110-89-4
CMF C5 H11 N



L4 ANSWER 57 OF 57 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1963:469602 CAPLUS
DOCUMENT NUMBER: 59:69602
ORIGINAL REFERENCE NO.: 59:12961a-f
TITLE: Azo and anthraquinone dyes
INVENTOR(S): Raue, Carl Boresch; Raue, Roderich
PATENT ASSIGNEE(S): Farbenfabriken Bayer A.-G.

SOURCE: 24 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 614660		19620905	BE	
GB 971920			GB	
US 3261827		1966	US	

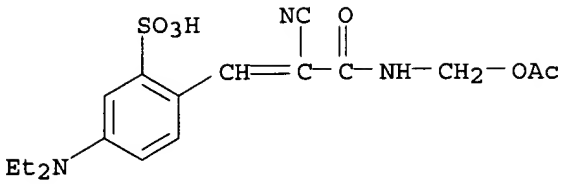
PRIORITY APPLN. INFO.: DE 19610307

AB Dyes contg. carboxamide groups are treated with an aldehyde and an org. acid to give compds. contg. C(:O)N(R)CH(R')OC(:O)R'' groups (R = H or a substituent, R' = H or alkyl; R'' = Me or Et) which dye cotton and cellulose textiles. Thus, a mixt. of the dye (p-H2NC6H4SO3H .fwdarw. 1-phenyl-5-pyrazolone-3-carboxamide) 5, paraformaldehyde (I) 1.5, and HOAc 15 is heated at 80-5.degree. for 40 min., Ac2O 5 parts added, and the mixt. heated at >80.degree. for 10 min., cooled, filtered, and the filtrate evapd. in vacuo at 40.degree. to give a dye. The prepd. dye (30 parts) is dissolved in 1000 parts H2O contg. HOAc, and cotton is impregnated with the soln., treated (foulard) to 70%, fixed at 140.degree. for 15 min., and rinsed and soaped to give a bright yellow dyeing with good wet-and lightfastness. Other dyes are similarly prepd. (compd. treated with I and HOAc, shade on cotton given): p-H2NC6H4SO8H .fwdarw. 3-methyl-5-pyrazolone, greenish yellow; reaction product of p-H2NC6H4CONH2 (II) with 1-amino-4-bromoanthra-quinone-2-sulfonic acid, blue; p-H2NC6H4SO3H .fwdarw. 1-phenylpyrazolone-3-carboxamide (III), reddish yellow; p-H2NC6H4CONHMe .fwdarw. 1-(p-sulfophenyl)-3-methylpyrazolone (IV), greenish yellow; [4,2-H2N(HO3S)C6H3CH2]2 two stacked rightwards arrow II, reddish yellow; II .fwdarw. 1,6,3-HO(H2N)(HO3S)C10H5, yellowish scarlet; II .fwdarw. 2,6-HO(HO3S)C10H6, reddish orange; II .fwdarw. 1,8,3,6-HO(AcNH)-(HO3S)2C10H4 (V), wine red; II .fwdarw. 1,6,3-HO(BzNH)(HO3S)-C10H5, reddish yellow; II .fwdarw. IV, yellow; reaction product of 1,3,3-trimethyl-2-methyleneindolene-5-sulfonic acid with 1-phenyl-4-(dimethylaminomethylene)pyrazolone-3-carboxamide, yellowish orange; p-H2NC6H4SO3H .fwdarw. 2,3-HO(H2NCOC10H6, bright red; o-H2NC6H4SO3H .fwdarw. 2,3-HO(H2NCO)C10H6, yellowish orange; 1:2 Cr complex of [3,4-HO(H2N)C6H3SO14H (VI) .fwdarw. III], slightly bluish red; 1:2 Cr complex of [VI .fwdarw. 2,3-HO(H2NCO)C10H6], violet; 1-amino-4-(m-ureidoanilino)anthraquinone-2-sulfonic acid, blue; 3-H2NC6H4NHCONH2 .fwdarw. IV, reddish yellow; 1:2 Cr complex of [2,3,5-HO(HO3S)(O2N)C6H2NH2 .fwdarw. III, yellowish brown; 1-amino-4-(o-carbamoylanilino)anthraquinone-2-sulfonic acid, reddish blue; 2-H2NC6H4CONH2 .fwdarw. 1-(2-sulfophenyl)-3-phenylpyrazolone, reddish yellow; 1-(o-sulfophenyl)-3-methyl-4-(m-ureidophenylazo)-5-pyrazolone, reddish yellow; Cr complex of [2,4,6-HO(HO3S)(O2N)C6H2NH2 .fwdarw. III], bluish red; 3-H2NC6H4NHCONHH2 .fwdarw. 1-(4,8-disulfonaphthyl)-3-methylpyrazolone, greenish yellow. Also prepd. are the following dyes (reactant, aldehyde, acid, color on cotton given): II .fwdarw. V, AcH, HOAc, reddish violet; II .fwdarw. 2,6-HO(HO3S)C10H6, EtCHO, HOAc, orange yellow; II .fwdarw. V, Cl3CCHO.H2O, HOAc, bluish red; II .fwdarw. IV, I, EtCO2H, reddish yellow; also prepd. is 4-(m-sulfophenylazo)-1-(acetoxymethyl)-3-methyl-5-pyrazolone, greenish yellow on cotton.

IT **14662-66-9**, Metanilic acid, 6-[2-cyano-2-[(hydroxymethyl)carbamoyl]vinyl]-N,N-diethyl-, acetate
(prepn. of)

RN 14662-66-9 CAPLUS

CN Metanilic acid, 6-[2-cyano-2-[(hydroxymethyl)carbamoyl]vinyl]-N,N-diethyl-, acetate (ester) (8CI) (CA INDEX NAME)


SO3H
NC
O
CH
C
C
NH
CH2
OAc
Et2N